Understand millions.

1. A bowl holds 100 peanuts. How many bowls would hold a million peanuts?_____

2. If you save 10¢ a day, how many days would it take to save a million cents?
_____

3. If you read 100 pages a week, how many weeks would it take you to read a million pages?_____

4. How many dimes are in one hundred dollars?_____

5. How many cents would you have if you saved one hundred dollars?_____

6. If you eat 10 apples a month, how many apples do you eat in one year?_____

7. If water pours into an empty fish pond at 10 gallons a minute, how many minutes does it take to fill the 10,000 gallon pond?_____

8. If you earn $10 a week, how many week would it take to earn one hundred dollars?_____

23+38=_____ 53-31=_____ 42x6=_____

429	429	987	754	765
+42	-42	-326	+428	+21

Write the value of the underlined digit.

421,<u>3</u>42,522 _____ <u>8</u>43,235,235_____

543,000,00<u>8</u>_____ 54<u>3</u>,875,921_____

4<u>3</u>2,000,001_____ 431,97<u>6</u>,000_____

Write the number in words.

423,235,210_____
_____
_____
323,000,032_____
_____
_____

Write in digits:
Eight hundred ninety-six million, four hundred seven thousand, two hundred twenty-
one_____
_____
_____

Make trees to get the factors of the following:
15 factors are _____36 factors are _____ 27 factors are _____

Write the next 4 numbers in this pattern: 8, 12, 16 _____

Greater than or less than < >

1,799,347_____1,797,221 4,820,321,343_____4,211,321,312

4,222,765,342_____3,231,453,223 431,311,531,313_____431,311,531,131

432,323_____423,232 321,000_____321,543

232,431,699_____232,431 765,976_____567,986

75 + 19=_____ 55-29=_____

7 x 8=_____ 6 x 6=_____

Rewrite the following in vertical form to add them up. Be sure to line up the correct place values.

432,493 + 43,982 + 420=

323,908+ 3,843 + 421,333=

432,321+ 98+932,311=

Write these in order from least to greatest.

3,231; 421,532; 42,322 _____

323,233; 432,513; 421,322_____

3,323; 42,322; 232_____

4,242; 432,422; 44,323_____

Remember rounding? Take the number to be rounded and look to the right of that number. If that number to the right is 5 or more your digit goes up. If it is 4 or less the digit stays the same and it is rounded down. Then change all the digits to the right with zeros.

Round 783 to the nearest 10. Answer is 780

Round to the nearest 10:

323_____ 44_____5,323_____

Round to the nearest 100:

499_____ 323_____6,498_____

Round to the nearest 1000:

5,234_____8,685_____9,678_____

Round to the nearest 10,000

79,488_____87,976_____

Round to the nearest 100,000

897,087_____ 843,001_____

Using a table

STATES	
Name	Population
California	32,643,321
Georgia	7,522,421
Arkansas	2,421,509
Indiana	12,332,322

Which state has the greatest population?_____

Which state has a population of eight million when rounded to the nearest million?_____

Which states have populations greater than 10,000,000?_____

Add or subtract the following vertically

532,321,642 + 213,356,677 + 336,643=_____

434,234,156+757,432,788+10,000=_____

653,323 – 331,532=_____

Commutative Property of addition

An easy way to add a column of single digit numbers is to find all that equal ten first. Show how you would group these numbers, then add them to find the sum.

7	2	7	1
3	5	5	5
4	4	6	+9
5	5	3	
+6	+ 6	+ 4	

When a number shows up several times, add those digits first.

4	3	5
2	7	4
2	7	5
2	+ 7	4
+ 2		+ 4

As Jadyn walked through the seashore, she turned over 6 sand buckets and counted the number of seashells under each. She found 2,4,4,4,6,8 seashells under the buckets. How many seashells did she count?

The number of children in the 10 rows at church were 3,3,4,4,5,5,3,3,3,6. How many children were there altogether?

Opposite operations
We know that 5 + 4= 9 then 9-4=5 yes?

Fill in the addition and subtraction sentences.

8 + 6=_____ then _____-8=6

12 + _____=18 then 18 - 12=_____

7 + _____=11 then 11 - _____=_____

22 - _____= 12 then _____+_____=

14= _____- 7 then _____=_____+_____

_____+13=226 then _____-_____=_____

After 6 more people walked into the party, there were 14 people inside. How many people were inside before the 6 entered?

When I added 11 more CDs to my collection, I had 37 total. How many Cd's did I have before I added the new ones?

On Saturday afternoon, we rode up the mountain. We went a total of 57 miles. If the return trip was 29 miles, how far was the trip there?

When adding inches, regroup 1 foot for every 12 inches.

$$\begin{array}{r} 1 \text{ ft } 8 \text{ in} \\ +1 \text{ ft } 8 \text{ in} \\ \hline 2\text{ft } 16 \text{ in} \end{array}$$

16 in.=1 ft 4 in.

$$\begin{array}{r} 2\text{ft} \\ +\ 1 \text{ ft } \ 4 \text{ in.} \\ \hline 3 \text{ ft} \quad 4 \text{ in.} \end{array}$$

$$\begin{array}{r} 2\text{ft.} \quad 4 \text{ in.} \\ +1\text{ft.} \quad 9\text{in.} \\ \hline \end{array}$$

$$\begin{array}{r} 12\text{ft.} \ \ 10 \text{ in.} \\ +1\text{ft.} \quad 5 \text{ in.} \\ \hline \end{array}$$

$$\begin{array}{r} 7\text{ft.} \ \ 4 \text{ in.} \\ +\ 5\text{ft} \ \ 5 \text{ in.} \\ \hline \end{array}$$

$$\begin{array}{r} 28 \text{ ft.} \ \ 8 \text{ in.} \\ +4\text{ft.} \ \ 9\text{in.} \\ \hline \end{array}$$

$$\begin{array}{r} 8 \text{ ft.} \ \ 9 \text{ in.} \\ +\quad 7 \text{ in.} \\ \hline \end{array}$$

Write the following in words 321,445,010_____

_____

_____

_____

What is the value of the underlined digit 4<u>3</u>2,677,321,987_____

Add 321,256,333,799 + 321,467,555,001= _____

Adding ounces and pounds

When adding ounces, regroup 1 pound for every 16 ounces.

8lb. 12 oz.
+1lb. 8 oz.
9lb. 20 oz.

20 oz.= 1 lb. 4 oz.

9 lb.
+ 1lb. 4 oz.
10 lb. 4 oz.

2 lb. 7 oz.
+ 1 lb. 11oz.

3 lb. 11 oz.
+1 lb. 11oz.

38 lb. 12 oz.
+ 9lb. 13 oz.

7 lb. 12 oz.
+ 13 oz.

15 oz.
+ 3lb 5 oz.

23 lb. 8 oz.
+ 2 lb 8 oz.

The twin babies were born today. One weighed 5 lbs. 4 oz. and the other one weight 6 lbs 8 oz. How much do the babies weigh together?

Adding minutes and hours

When adding time, regroup every 60 minutes to 1 hour.

2 hr. 24 min.	5 hr + 1 hr. 1 min=
+3 hr. 37min.	6 hr 1 min.
5 hr. 61 min	61 min = 1 hour 1 min.

16 hr. 51 min.	4 hr. 43 min.	2 hr. 39 min.
+ 4 hr. 8 min.	+2hr. 42min.	+1hr. 28 min.

Use the clock to help you with these

If it is 12:15 p.m. What time will it be in 50 min.?_____

If it is 6:25 a.m. What time will it be in 1 hour 5 min.?_____

It is 1:15 p.m. what time will it be in 4 hours 30 min.?_____

The amount of time that I exercised this week was:

Monday	1 hr. 10 min.
Tuesday	30 min.
Wednesday	15 min.
Thursday	2 hr. 5 min.
Friday	45 min.
Saturday	3 hr.

What is the total amount of time I exercised with activity?_____

Review

3,234,244 + 28 + 2,345=_____

3 + 7+ 5 +4 + 6 + 3 + 7=_____

15 + _____=27

_____+19=_____

375+643=_____

8 ft. 11 in.	14 lb. 8 oz.	4 hr. 44 min.
+2 ft 6 in.	+ 6 lb. 9 oz.	+ 2 hr. 50 min.

We are having friends over for turkey dinner. We have bought two turkeys for dinner. One weights 15 lbs. 4 oz. and the other one weighs 19 lbs 14 oz. how much turkey do we have to feed everyone?

_____

Estimating

To estimate the outcome of numbers, round the numbers and then add or subtract. This skill can be used everyday. An example would be if you have a distance of 862 miles to travel and you have gone 381, you can round and subtract in your head 900-400 leaves approximately 500 more miles to go.

48 + 13= (50 + 10= 60) The real answer is 61 but we are using estimated amounts.

Subtract or add by estimating. Write the estimating problem next to the original.

93	571	4866
-68	+254	-2734
71	622	8765
+17	-489	+2436

I have our friends coming to visit and there are 12 of our family, 11 in the Bakers and 8 in the Anters. We need to make 3 tacos per person about how many tacos should I make. Not exact, estimate the amount.

_____

Solve.

_____-10= 5 so 5 + 5 = 10

_____-8= 9 so _____+_____=_____

_____-12=_____ so _____+_____=_____

_____-8=_____so _____+_____=_____

We also know that if 11 -4= 7 then 11-7=4 right?

12 -_____= 7 then 12-_____=5

33-_____=11 then 33 -_____=22

85-_____=25 then 85-_____=_____

187-_____=____ then 187-_____=_____

After I gave my friend 12 candies from my stash, I still had 14 pieces left. How many pieces did I have before I shared with my friend?

The bag of donuts had 20 left in it. Stephen took some out for breakfast and left 13 in the bag. How many did he eat?

A variable is a letter in an equation that stands for what is not known. Solve the missing number. The first one is done for you.

25- 13= x x = 12

26,251-421= c c=_____

17-13= p p=_____

5,222- 133= r r=_____

85-50= b b=_____

356- 123= k k=_____

2,871-1,897=s s=_____

76-22= r r =_____

7,326-2,333= x x=_____

Subtract the units. Regroup the feet and inches.

3 ft. 5 in.
-1 ft. 8 in.

Cannot take 8 from 5, so regroup 1 foot.

2 + 12 in. → 17 inches

~~3~~ 2 ft. 5 in.
-1 ft. 8 in.

2 ft. 17 in.
-1 ft. 8 in.
1 ft. 9 in.

5 ft. 8 in.
-3 ft 9 in.

17 ft. 3 in.
- 5 in.

11 ft. 5 in.
-8 ft. 6 in.

20 ft. 4 in.
-5ft 8 in.

17 ft. O in.
- 1 ft. 6 in.

115 ft.
-7 ft. 8 in.

Subtract the units. Regroup the days and the week.

3 weeks 1 day - 1 week 5 days=_____

5 weeks 2 days - 2 weeks 5 days=_____

Subtracting different bases

Rewrite the following and line up vertically to subtract. Regroup as needed.

17 lb. 3 oz - 12 lb. 5 oz.=_____

5 lb. 8 oz.- 3 lb 8 oz.=_____

17 lb. 3 oz. – 12 lb. 11 oz.=_____

7 lb – 1 lb 9 oz.=_____

3 min. 25 sec.- 1 min. 45 sec.=_____

7 min. 46 sec.- 3 min 29 sec.=_____

12 min. 19 sec- 8 min. 42 sec.=_____

16 min. 43 sec.-8 min 25 sec.=_____

Remember how to multiply with one digit multiplication. If not ask your teacher.

322 X 8	1,134 x 2	879 x 5
739 X 2	654 x 5	6,543 x 7
121 X 2	4322 x 3	322 x 5

Lets do some mental math—give this to mom and have her ask you

1. how many tens in 543
2. how many hundreds in 801
3. write me the number 4,329
4. write me the number 50, 398
5. write me the number 342,201
6. add 3 + 5+ 2-1=
7. add 2+2+2+2-1=
8. how many sides to a rectangle?
9. Add 20 + 30-5

More one digit practice.

327	7654	5432
X 3	x 2	x 5

5,432	432	6,890
X 6	x 5	x 2

Add the following:

4,321+5,654+2+214=_____

Subtract the following:

3,356-2,107=_____

5,000-2,987=_____

Two digit multiplication---ask if you need to know how to do them.

44 X22	77 x14	22 x14	11 x63
21 X16	15 x14	28 x11	32 x36
32 X11	32 x21	65 x27	88 x22

Rewrite the following and solve:

55 x 22=_____ 43 x 81=_____

Practice some more

432 X21	654 x21	333 x11
3,198 X 3	5,214 x 21	2,125 x214
321 X 4	803 x217	543 x88

Multiplication opposite
Use the multiplication problems to solve the division.

6 x 7= 42 then 42÷7= 6 and 42÷6=7

4 x 8=_____then 32 ÷8= _____ and 32 ÷4 =_____

9 x 9 =_____then _____÷_____=_____ and_____÷_____=_____

8 x 7=_____ then _____÷_____=_____ and_____÷_____=_____

5 x 5=_____ then _____÷_____=_____ and_____÷_____=_____

6 x6=_____ then _____÷_____=_____ and_____÷_____=_____

7x7=_____ then _____÷_____=_____ and_____÷_____=_____

8x8=_____ then _____÷_____=_____ and_____÷_____=_____

4x4=_____ then _____÷_____=_____ and_____÷_____=_____

3x3=_____ then _____÷_____=_____ and_____÷_____=_____

2x2=_____ then _____÷_____=_____ and_____÷_____=_____

10x10=_____ then _____÷_____=_____ and_____÷_____=_____

Solve: 543 x 213=_____

REVIEW

Write 4,507,303,027 in words_____

_____

_____

Write in numerals: sixty-nine million, one hundred twelve thousand, two hundred seven.

_____

Round 3,242 to the nearest hundred._____

Round 27,456 to the nearest ten._____

Round 78,531 to the nearest thousand._____

3 + 7 + 4+ 6 + 2=a a =_____

26,425 + 932= x x =_____

59 + _____=78

22 ft. 7 in.	7lbs. 10 oz.	8,432,427
+ 3ft. 6in.	+3 lbs 10 0z.	- 25,871

_____-42=39 87-_____=43 17 min. 15 sec.

- 5min. 22 sec.

How much change from $5.00 for a $3.29 purchase?_____

REVIEW

37x85=_____ (7x7) x5=_____

75 x 8= x x =_____ 4 x93= c c =_____

43 x 33=_____x 43 124 x 22= k k=_____

Multiple 43 x 100= x x=_____ 57 x 1000= y y=_____

Estimate 4,521 + 3,451=_____ 79 x 8=_____

What is the value of the underlined digit 4<u>3</u>2,356,666,000_____

What is the value of the underlined digit 543,6<u>6</u>6,777,333_____

5,362	6,875	5,399
<u>+3,543</u>	<u>-3,999</u>	<u>x2,765</u>

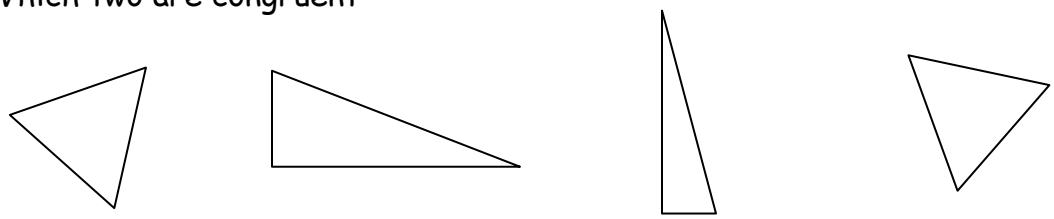
Shapes

A rectangle has how many sides?_____
Draw me one

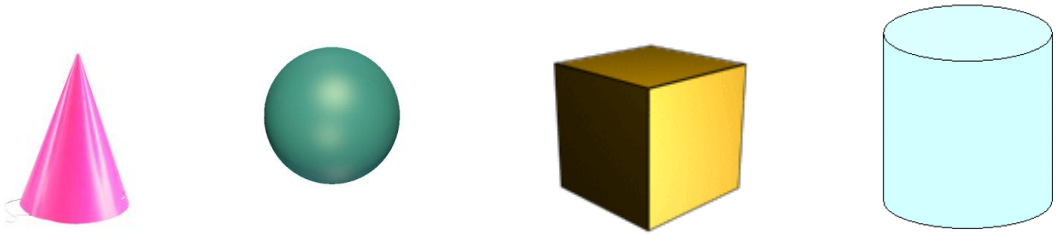
A square has how many sides?_____
Draw me one

A circle has how many sides?_____
Draw me one

When two triangles are the same size and shape, we say they are congruent.
Which two are congruent



Here are some more geometrical shapes



Cone sphere cube cylinder

List some things that are this shape
Cone_____
Sphere_____
Cube_____
Cylinder_____

Calendar

How many months are there in one year?_____

What number month is your birthday?_____

How many days of the week are there?_____

Write the days of the
week?_____,_____,

_____,_____

_____,_____

_____,_____

Name me a month that spring occurs?_____

Name me a month that winter occurs?_____

Name me a month when summer occurs?_____

Name me a month when falls occurs?_____

What day was it yesterday?_____

What day is it tomorrow?_____

What day do we goto church on?_____

What day does the weekend begin on?_____

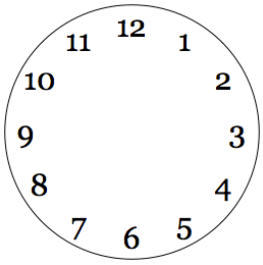
When is your birthday?_____

What is todays date—the month, day, and year?_____

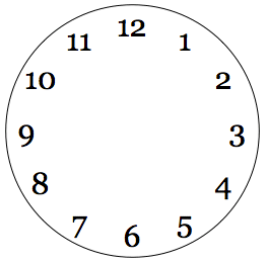
What year is it?_____

What year were you born in?_____

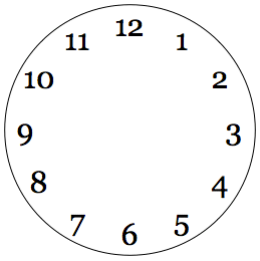
Write the following times on the clock:



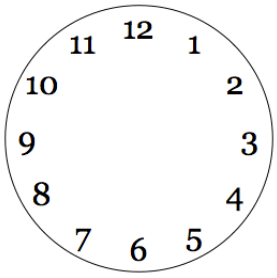
2:35



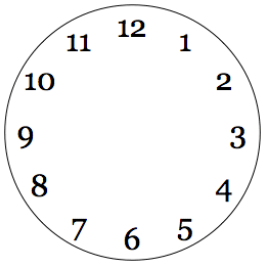
5:10



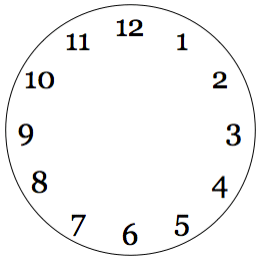
12:45



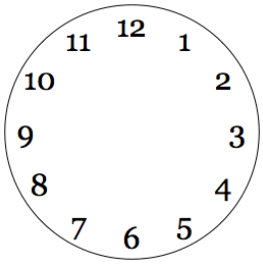
1:20



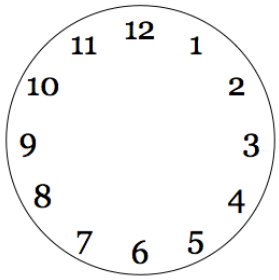
3:35



7:38

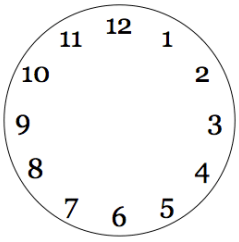


12:30

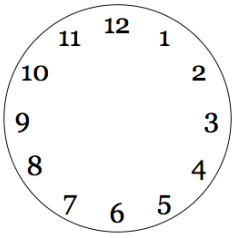


9:10

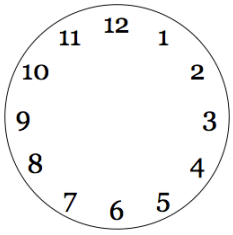
Write the following times



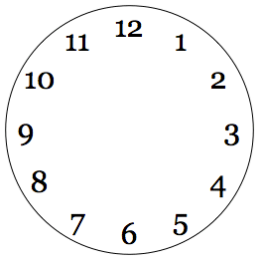
6:30



9:00



4:11



5:31

Count by 5's

Count by 25's

Count by 10's

Count by 5's backwards

100	95								

Count by 2's these are called EVEN numbers

Count by 2's starting at 1 these are called ODD numbers

1	3								

Write if the number is ODD or EVEN. Even means that it has a pair. Odd means it is by itself.

2_____4_____1_____

8_____3_____7_____

Circle the EVEN numbers

4	6	7	3	9
13	46	82	1	32
43	21	17	8	66
89	21	97	54	63

What number comes next:

2	4				12				
5	10								
11	21				61				
21	25	29							

Write < or > or =

73+ 29_____98

22_____10+12

543+543_____8,987

7,875_____7,876

7,876_____487+432

7,987_____8,875-1,000

Circle the ODD numbers

4	6	7	3	9
13	46	82	1	32
43	21	17	8	66
89	21	97	54	63

Write the words for the following numbers

10_____30_____

54_____75_____

40_____50_____

60_____100_____

80_____1,000_____

10,000_____1,000,000_____

1,000,000,000_____

11_____12_____

13_____14_____

15_____16_____

17_____18_____

19_____21_____

You have been practicing writing numbers. When you write the numbers such as "21" it is written with a hyphen twenty-one. 45 is written forty-five

Write the following numbers in words:

14_____ 27_____

33_____ 53_____

59_____ 76_____

22_____ 30_____

20_____ 9_____

1_____ 0_____

100_____ 45_____

88_____ 17_____

16_____ 11_____

Count by the odd numbers starting at 1

Count by the even numbers starting at 2

Give me an example of the following shapes:

Sphere_____ cone_____

Cylinder_____ cube_____

Write the words for the following

1st_____

2nd_____

3rd_____

4th_____

5th_____

6th_____

7th_____

8th_____

9th_____

10th_____

3,245+2,439=_____

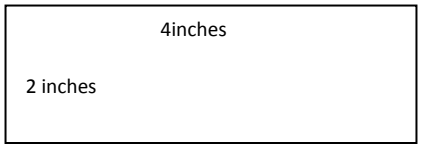
63,567 x 212=_____

Practicing division facts. Remember division is opposite of multiplication

24÷3=_____	81÷9=_____	40÷5=_____
4÷4=_____	90÷9=_____	56÷8=_____
24÷6=_____	27÷3=_____	8÷8=_____
6÷1=_____	20÷2=_____	63÷9=_____
56÷7=_____	6÷3=_____	45÷5=_____
6÷3=_____	6÷6=_____	10÷5=_____
18÷3=_____	4÷1=_____	15÷5=_____
30÷3=_____	24÷4=_____	42÷6=_____
28÷7=_____	50÷5=_____	8÷2=_____
35÷7=_____	72÷8=_____	16÷2=_____
28÷7=_____	36÷6=_____	64÷8=_____
21÷3=_____	27÷9=_____	40÷5=_____
81÷9=_____	42÷7=_____	9÷3=_____
4÷2=_____	10÷1=_____	44÷11=_____
16÷4=_____	5÷5=_____	36÷9=_____
18÷3=_____	18÷9=_____	30÷5=_____

Perimeter

When you measure the length of the sides of an object and then add them all up you get the perimeter.



We know that a rectangle's sides are congruent or the same so both sides would be 4 and the other side would be 2

4 + 4 +2+2=12 inches

What is the perimeter of your book to the nearest inch?_____

What is the perimeter of this piece of paper in inches?_____

What is the perimeter of the picture frame in feet?_____

Give me an example of a sphere?_____ a cone?_____
Cylinder?_____cube?_____

Greater than or less than

42 x 3_____56 5x5_____25

7232-765_____543 7,876_____654+432

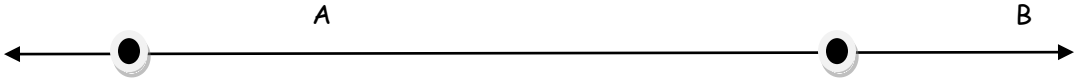
5432	3255	5432
+432	+4325	-678

Points, Lines, Segments

In math, a point is an exact spot. You show a point with a dot like this: .

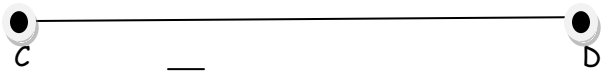
To name a point, label the point with a letter from the alphabet: . A

If you put two points on a piece of paper and then connect them, you will have a line. Here is a line going through points A and B



A line is straight and goes on forever. The arrows show that the line continues in both directions. This is AB $\overleftrightarrow{AB}$

A line segments is a part of something. It has 2 end points.



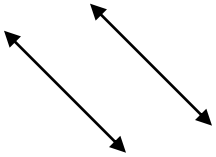
This is line segment $\overline{CD}$ We put the line over top of it to show it is a line segment.

Here are some more lines

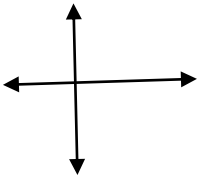
Horizontal

vertical

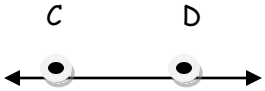
parallel lines will never connect.

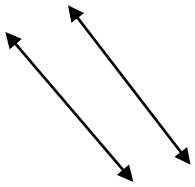


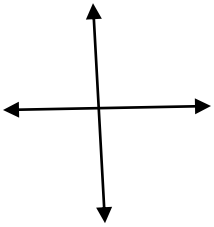
These are perpendicular they make an L



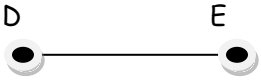
Label:





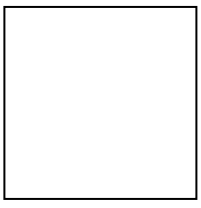


_____ _____ _____ _____

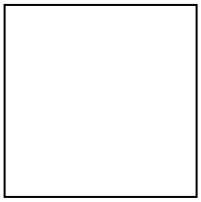


_____

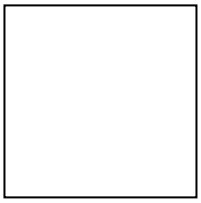
Draw me $\overleftrightarrow{DE}$



Draw $\overline{CB}$



point A

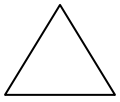
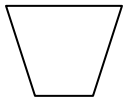


LINES OF SYMMETRY

When you divide an object exactly down the center and have two equal parts it is called a line of symmetry.

Think of a butterfly, if you divided the butterfly down the middle, you would have two sides that were symmetrical. Not everything is symmetrical. If I took a coffee cup and divided it down the center, it would not be symmetrical because of the handle.

Draw a line down the following that can be divided symmetrically:

A C O L D E  

Draw me a line AB

Draw me a line segment BC

Draw me a point D

Draw me a cyclinder

Draw me a rectangle inside of a circle

Lets do some mental math. Hand this to mom and let her ask you the questions:

1. If it is 2:00 what time will it be in $\frac{1}{2}$ an hour?
2. How much is 4 hundreds 3 tens and 8 ones?
3. how much is 432 times zero?
4. how much is 3 plus 4 plus 2?
5. how much is ten less than 40?
6. how much is 200 plus 3 tens and 5 ones?
7. write the number 749?
8. how many ones are in 701?
9. how many tens are in 44?
10. how many hundreds are in 763?
11. Write the words out for zero to ten

Word Problems

1. Lauren read 28 pages in her reading book. Yesterday she read 15. How many did she read altogether?

   _____

2. Austin went to the store and bought 15 packs of gum for school. He also bought 29 pieces of licroace. How many pieces of candy did he buy?

   _____

3. Jadyn is buying dog treats for her 2 dogs. If she wants to buy each dog 3 treats each, how many treats will she buy?

   _____

4. Randall had 52 clown noses and gave Kyle 17 of them. How many does Randall have left?

   _____

5. Evan had 24 meatballs on his plate. Collin stole 12 away. How many does Evan have now?

   _____

6. Riley had 28 pieces of candy. She ate 6 in the morning and then 10 in the afternoon. How many pieces does Riley have left?

   _____

7. Tegan has 76 stickers. He uses up 32 and then buys 24 more at the store. How many stickers does Tegan have?

   _____

8. Molly has 231 markers, she gives 115 markers to Lauren. Her mother buys her 30 more. How many markers does Molly have?

   _____

9. Bob has 27 buckets. He sells 14 of them and then buys 28 more. How many does Bob have?

   _____

1. The temperature today was 80 degrees. Yesterday it was 74 degrees. How many degrees did it increase?

   _____

2. We had the following rainfall in inches this week: 4, 2, 6, 12, 4, 6, 2. How much total rainfall did we have?

   _____

3. I had $12.50. I wanted to buy a ball for $2.25 and a bat for $6.30. Do I have enough money?

   _____

4. The concert cost $10. Food will cost us $8.50. Parking is $4.00 I have only saved $20 this month, will I be able to go to the concert?

7214 + 213+579=_____

4,278 x 23=_____

6,532=5,989=_____

3+3+7+9+1+8+2+5+5=_____

81÷9= 36÷6=

100÷10= 25÷5=

$ 32.76	$ 271.12	$ 32.89	$ 21.00
+$ 8.00	+$ 110.43	-$ 11.75	-$ 15.00

Solve:

$4.03 + $2.99+ 54¢=_____

$87.86-$12.96=_____

$ 2,987.77+ $8,964.00+ $3,632.55=_____

$863,876- $237.77=_____

$ 4,579.66-$2,678.88=_____

Write the following:

Two thousand, four hundred fifty-two:_____

One thousand, five hundred sixty-one:_____

Nine thousand, two hundred forty-three:_____

5000+500+50+5=_____

3000+200+9=_____

500,000+40,000+3,000+200+90+8=_____

400,000+20,000+1,000+900+20+6=_____

Ninety thousand, four hundred fifteen:_____

Six hundred thousand, eighty-four:_____

What number comes before and after the following:

_____562_____ _____7,432_____ _____999_____

_____5,432_____ _____25,233_____ _____1000_____

_____8000_____ _____32,000_____ _____758,976_____

Write < > =

762_____543 22,987____23,789 756____765

987,789____987,879 23,876____22,000 890____980

766____766 4329_____3297 555_____5555

Mental math—give to mom and have her ask you these questions:

1. Write the number 5, 321
2. What number is in the thousands place in 4, 321
3. Add 5 plus 4 plus 3
4. I have 10 marbles, I lost 3 then bought 4 more. How many do I have
5. What number is in the hundreds place in 43, 210
6. Write the number 72, 024
7. Write the number 892, 432
8. What is 400, 3 tens and 2 ones
9. What is 4000 plus 200 plus 8 tens and 9 ones
10. Draw me a cone
11. Draw me a cylinder
12. Draw me a triangle
13. Draw me a rectangle
14. Draw me a square
15. Draw a circle and divide it into 4 parts equally

43,254	574,876	3,764,876
+22,678	+654,865	+5,876,888

6,876,888,900	5,876,876,999
- 786,201	-3,765,890,222

5,764,822	8,654
X 3	x 14

We are going to work on long division today. Let your teacher show you how.

$2\overline{)420}$ $6\overline{)636}$ $5\overline{)525}$

$3\overline{)312}$ $3\overline{)9{,}021}$ $8\overline{)816}$

$2\overline{)432}$ $5\overline{)325}$ $7\overline{)497}$

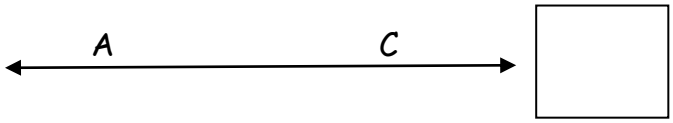
Lets work more on long division

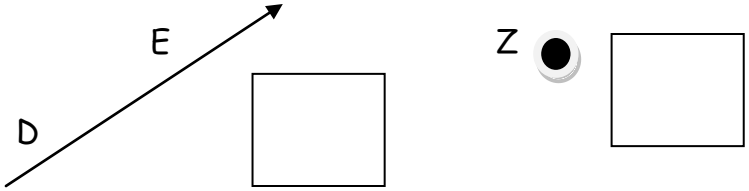
$2\overline{)630}$ $6\overline{)642}$ $5\overline{)625}$

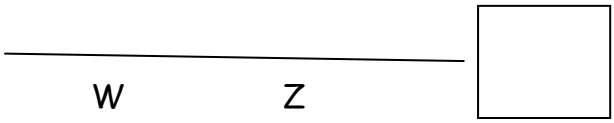
$3\overline{)324}$ $3\overline{)9{,}636}$ $8\overline{)872}$

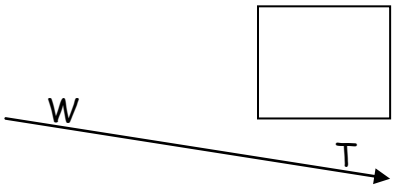
$2\overline{)474}$ $5\overline{)365}$ $7\overline{)463}$

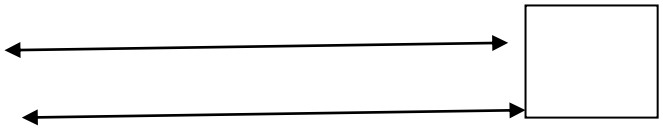
Write the correct letter in the box next to the figure.

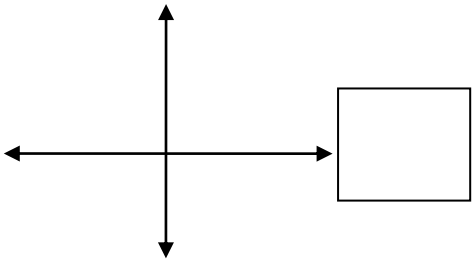


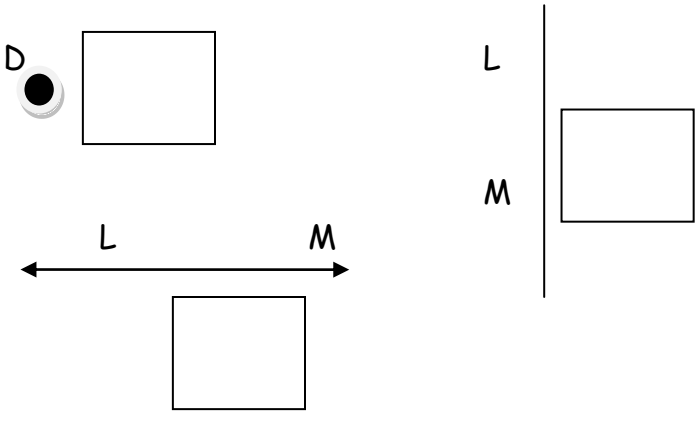










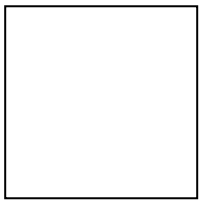
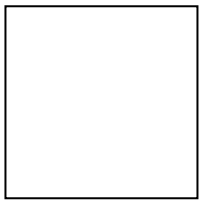


A. Line AC
B. Line LM
C. Line segment LM
D. Line segment WZ
E. Parallel lines
F. Perpendicular lines
G. Point D
H. Point Z
I. Ray DE
J. Ray WZ

Mental math time with Mom:

1. What digit is in the hundreds place for 4, 321?
2. Write the number 543 in digits
3. Write the number 23, 322 in digits
4. Which number is greater 4, 032 or 4, 320
5. Write the number 789,385
6. Write the number 432, 299
7. What is 4 +4+2-3=
8. How many sides does a triangle have?
9. how many months are in a year
10. how many days are in a week
11. how many minutes are in one hour
12. how many seconds are in one minute
13. how many hours in one day
14. put your arm vertical
15. put your arm horizontal
16. what is closer to a foot long-----a paper clip or a knife
17. what is closer to 3 feet long---a bird or a snake
18. what is closer to 6 inches long a spoon or a fly
19. write down how to count by 4
20. what is 500 and 3 tens and no ones

$7\overline{)4977}$ $5\overline{)25575}$ $4\overline{)41624}$

Draw an octagon  Draw a diamond 

Circle the EVEN numbers;

234	555	7865	4567	8890	4321
3214	2321	7655	7777	1000	100
432,888	3,888,333	42,148,800		43,567	

Draw me 2 congruent hearts

Draw me line AB

Draw me line segment CD

Draw me ray XD

Draw me point D

Draw me a right angle

Draw me an obtuse angle

Draw me an acute angle

Parallel lines look like:

Perpendicular lines look like;

When you work with larger numbers dividing you round the number you are dividing by to make it easier. If you have leftovers you write it with a remainder (r)

$22\overline{)3849}$

$51\overline{)6578}$

$31\overline{)32678}$

$28\overline{)3276}$

$12\overline{)781}$

$11\overline{)12111}$

Practice some more….

$42\overline{)4221}$ $5\overline{)45270}$

$30\overline{)90120}$ $11\overline{)65432}$

$71\overline{)8926}$ $20\overline{)32670}$

REVIEW

87+ 26,654 + 3=_____ 22 + _____=39

7ft. 3 in.	3 wks 2 days	89-27=x
+2 ft. 9in.	- 3 days.	X=_____

29, 353
+ 7,543

87 x 4=_____

22 ⟌ 3849

9 ⟌ 736

76 x 30=_____

What is the change from a five dollar purchase of $2.32?_____

Draw:

Acute angle

right angle

obtuse angle

Draw a pentagon

Draw a hexagon

If there are 12 eggs in a dozen, how many eggs are in ½ dozen?_____

If there are 100 centimeters (cm) in one meter, how many cm are in ½ meter?_____

If there are 16 ounces in a pound, how many ounces are in ½ pound?_____

If there are 4 quarts in a gallon, how many quarts are in ½ gallon?_____

If there are 60 seconds in a minute, how many seconds are in ½ minute?_____

If there are 1,000 meters in a kilometer, how many meters are in ½ kilometer?_____

If there are 30 days in most months, how many days are in ½ month?_____

If there are 24 hours in a day, how many hours are in ½ day?_____

If there are 36 inches in one yard, how many inches are in ½ yard?_____

If there are 2,000 pounds in a ton, how many pounds are in ½ ton?_____

Draw a pentagon

Draw a hexagon

Draw an octagon

Draw a right angle

Story problems

1. Jadyn had 25 bouncy balls. She wanted to wrap them up in the 5 bags that she had. How many would go in each bag?

2. Brooklyn has 7 purple beads, 1 black, 8 red, 4 green, and 7 orange. How many does she have altogether?

3. Evan earned $25 working in Dad's shop. He spent $14.50 on a game and $2.35 on snacks. How much did he have left?

4. There are 432 girls and 257 boys in our school. What is the difference in the number of boys and girls?

5. The girls sold 752 flowers this year for Valentines Day. The boys sold 433. How many more did the girls sell?

6. My birthday party favor bags each get 6 pieces of gum. I am making 243 of them for the big party. How many pieces of gum do I need to buy?

7. The ages of my children are 22, 3, 19, 4, 17, 5, 15, 6, 9, and 10. Put the ages in order from youngest to oldest.

8. I have 36 chocolate cookies to give out to my 6 children. How many cookies does each child get if divided up evenly?

Mental Math give this to Mom

1. How many tens in 4, 321
2. How many sides does an octagon have
3. Write the number 432, 017
4. Add 24 plus 10 plus 2
5. How many hundreds in 7543
6. Whenever you multiply a number by zero what is your answer
7. Add 15 plus 5 plus 2 minus 1
8. Add 30 plus 20 minus 5
9. How many times does 5 go into 25
10. How many days in a year normally
11. How many months in a year
12. How many days ina week
13. How many hours in one day
14. How many minutes in an hour
15. How many seconds in a minute
16. What is the perimeter of a rectangle if the sides are 4 inches and 1 inch
17. Is the letter o symmetrical
18. Is the letter L symmetrical
19. In the following, place comma's in their proper places.

Put commas in the correct places. Remember to start on the right.

4256727899	432215876	567854321
9870765332	540970054	4321009876

7654	4321	6543	8907	5655
-4321	-4211	-3897	-5678	-3478

What is the VALUE of the underlined digit

432,8<u>7</u>6,543 _____ <u>3</u>21,765_____

What is the value of the underlined digit:

3,2<u>3</u>4,876_____ 4<u>3</u>2,989,900_____

<u>2</u>34,876,870_____ 233,787,98<u>8</u>_____

23<u>1</u>,999,988_____213,6<u>5</u>4,877_____

Write the standard form of the expanded version:

400,000+20,000+4,000+900+80+8=_____

30,000,000+2,000,000+400,000+30,000+7,000+600+80+2

_____

900,000,000+70,000+8=_____

70,000+400+6=_____

Use < > =

432,987_____422,767 2,345,888_____1,987,999

8,789,980_____8,789,990 9,888,777_____9,888,777

598,765_____589,756 4,876_____4,786

Multiplication with zeros

Any time you have a number times a multiple of ten you just add extra zeros.

If you have 342 x 100= there are 2 zeros so your answer is 34,200

If you have 567 x 1000= there are 3 zeros so your answer is 567,000

Solve:

354x10=_____ 4325x1000=_____

5423x100=_____ 543x100=_____

32x10,000=_____ 87x1000=_____

42x10000=_____ 124x1000=_____

53 x 10000=_____ 3,231x 10000=_____

Mental math time---give to Mom

1. Draw me a right angle
2. Draw me an acute angle
3. Draw me an obtuse angle
4. Draw me a line segment RS
5. Draw me a line TR
6. Draw me a ray SR
7. Draw me a pentagon
8. Draw me a point K
9. Draw me parallel lines
10. Draw me perpendicular lines
11. Draw me a sphere
12. Draw me a cone
13. Draw me a cylinder
14. Draw me a cube---learn how
15. Draw me a diamond
16. Draw me a hexagon
17. Draw me a star—learn
18. Draw me a set of congruent hearts
19. Draw me a triangle that is assymetrical
20. Draw me a star inside of a rectangle

Word problems

1. I bought a ball for $2.42, a bat for $1.75, and a mitt for $1.25 How much did I spend in all?

2. I went out to lunch and spent $2.75 on pizza, 43¢ on an apple, and 85¢ on milk. How much did I spend in all? I paid with a $5.00 how much change should I get back?

3. I ran 7 miles on Monday, 3 on Tuesday, 12 on Wednesday, 1 on Thursday, and 8 on Friday. How many miles did I run all week?

4. My plants grew 2 " last month, 3" this month, and I expect they will grow 1 $\frac{1}{2}$ more inches in the coming months. How tall will my plants be?

5. My girls weight 23 lbs, 46 lbs, 57 lbs, and 76 lbs. How many lbs all together do they weigh?

6. My boys have driven 3,243 miles this year. My girls have driven 1, 768 miles. How many more miles did the boys drive?

Multiplying money

When you multiply dollars and cents, you do so the same way when you multiply other numbers. When you are finished, you count over how many decimal places over are in your problem and then move it over in your answer.

$5.75	$4.32	$2.67
X 43	x 9	x31

$25.54	$32.87	$12.99
X 32	x12	x 33

543x100=_____ 66x100=_____

213x10=_____ 632x1000=_____

43x1000=_____ 754x10=_____

543	654	782	211	201
X213	x212	x321	x432	x732

Multiply 3 numbers: do two numbers at a time, then the next one.

4 x 5 x 3= _____ 10x2x5=_____

40x2x3=_____ 3x3x3=_____

Remember tally marks? Make me tally marks for the following numbers:

6 8

12 21

Fill in the blanks:

1 gallon is_____quarts

3 gallons are _____quarts

1 yard is _____feet

1 foot is_____inches

1 mile is_____feet

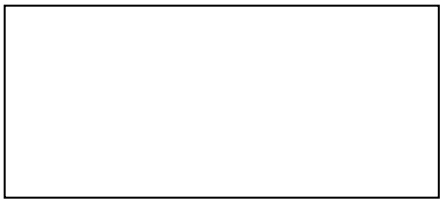
1 kilogram is _____grams

1 quart is_____pints

1 pint is _____cups

Perimeter---add up the sides Area is L x W= area

5 ft

3ft 

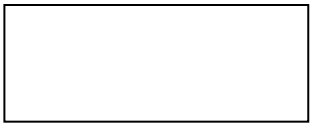
What is the area:
What is the perimeter:

10 ft

2ft 

What is the area:
What is the perimeter:

3 inches

2 inches 

what is the area:
What is the perimeter:

Make me tally marks for the following:

14 15 8

Division two digit

20 ⟌ 4020 　　11 ⟌ 232 　　50 ⟌ 2504

Roman numerals from 10 to 100, counting by tens

X XX XXX XL L LX LXX LXXX XC C

I is 1 　　X is 10 　　C is 100 　　M is 100
V is 5 　　L is 50 　　D is 500

Can you write the following numbers based on the chart:

17 _____200 _____35_____42_____70_____525_____

Fill in the chart:
There are _____hours in 1 day
There are _____minutes in 1 hour
There are ____seconds in 1 minutes

How many minutes are there in 6 hours and 12 minutes?_____
How many seconds are there in one day?_____
How many minutes are there in one day?_____
How many hours are in 6 days?_____

1 ft=_____in 　　1 lb=_____oz 　　1 pt=_____cups

1 yd=_____ft 　　2000lb=_____ton 　　1 qt=_____pts

1 mile=_____ft 　　1 gal=_____qt

1 mile=_____yd

Write words for the following:

1st_____ 6th_____

2nd_____ 7th _____

3rd_____ 8th_____

4th_____ 9th_____

5th_____ 10th_____

Write the months of the year:

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Write the following

10=_____ 20= _____

30=_____ 40=_____

50=_____ 60=_____

70=_____ 80= _____

90=_____ 100=_____

14 ⟌ 16742 9 ⟌ 6,875 25 ⟌ 125025

I took the family out to dinner at the buffet. It was 9.75 per person. We had 5 people eating. How much did dinner cost?_____

I paid for dinner with a 50 dollar bill. The dinner total was $47.74. Count back change as I am to receive it. _____

The pond had 274 fish in it. There were 8 of us fishing. If we caught all the fish evenly, how many fish would we hook per person?_____

Write the following in words:

5,243_____
_____

2,890_____
_____

876_____
_____

65,000_____
_____

Add the following dollar amounts. Make sure to line up the decimals:

$24.32 $3.99 $.21 $2.04_____

Add the following numbers.

26 432 43 2 6 _____

Stacey gave four pencils to each of six friends. How many pencils did she give away to her friends?_____

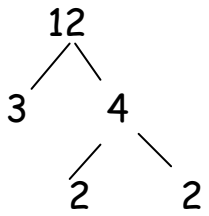
Maria's classroom is 22 feet long and 25 feet wide. How much paper is needed to make a border around the entire classroom? _____

The perimeter of a pentagon is 94 yards. The sides measure 10 yards, 15 yards, 22 yards, 30 yards, and n yards. What is the measurement of the fifth side? _____

The school's rectangular garden is 12 feet long and 14 feet wide. How much fence is needed to enclose the garden? _____

TREES --- Factors

By knowing how to do this, it will help you be able to reduce your fractions down easily. Take a number and form "trees" with it until you can't go down anymore. Which numbers when multiplied together give you that number?



The bottom numbers can't be reduced down anymore so we say that the factors of 12 are 2 and 3

Create your own trees by finding the factors for the following numbers.

20 16 44 8

Factors _____ factors _____factors _____ factors _____

FRACTIONS

Fractions show a part of a whole. They are written like this

3 numerator

5 denominator

You can make an equivalent fraction by dividing or multiplying both the numerator and denominator by the same number. Here is an example:

$\frac{1}{4} \times 2 = \frac{2}{8}$ multiply both the numerator and denominator by 2

$4 \times 2 = 8$

$\frac{9}{12} \div 3 = \frac{3}{4}$ divide both the numerator and denominator by 3

$12 \div 3 = 4$

This shows you that both of those numbers above are equal.

This is also helpful in learning how to simplify your fractions and reduce it down to lowest terms. It is much easier to say I have $\frac{3}{4}$ of a candy bar instead of 9/12.

A fraction is in the lowest terms when its numerator and denominator have no common factors greater than 1. Remember the trees? So to put a fraction to it's lowest terms, divide its numerator and denominator by common facts, until they have no common factor greater than 1.

Here is an example.

$\frac{5}{10} \quad \frac{\div 5 =}{\div 5 =} \quad \frac{1}{2}$ ***remember whatever you do to the numerator has to be done to the denominator

$\frac{1}{2}$ is the reduced to lowest terms. Reduce the following fractions to lowest terms:

$\frac{4}{16}$ =_____ $\frac{6}{24}$ =_____ $\frac{5}{30}$ =_____ $\frac{2}{10}$ = _____

Improper fractions and mixed numbers

When the numerator of a fraction is equal to or greater than the denominator, the fraction is called an improper fraction. Here are some examples of improper fractions. $\frac{5}{5}$, $\frac{7}{4}$, $\frac{13}{3}$. When you have an improper fraction they should be written as whole numbers and one part that is a fraction. Instead of saying $\frac{7}{4}$ you should say 1 ¾ .

The bar in a fraction means the same thing as a division sign. When you see 7/4 it says 7 divided by 4. If you were to write that out as a division problem like this:

$4\overline{)\ 7}$ Then solve.

When you have a remainder, instead of writing it as a remainder (3), you write it as the numerator and the divisor (4) becomes the denominator. Answer is $1\ \frac{3}{4}$

Let's practice changing these improper fractions to proper fractions with whole numbers. Do them as a division problem so you can get an answer. You will eventually do them in your head.

$\frac{14}{3}$ =_____ $\frac{4}{3}$ =_____ $\frac{11}{5}$ =_____

$\frac{7}{2}$ =_____ $\frac{3}{2}$ =_____ $\frac{16}{5}$ =_____

$\frac{4}{3}$ =_____ $\frac{8}{8}$ =_____ $\frac{32}{32}$=_____

Identify which of the following is an example of: mixed number, fraction, improper fraction, whole number

33_____ $2\ \frac{1}{2}$ _____

¾ _____ $\frac{49}{17}$ _____

Let me teach you how to calculate the following equivalent fractions by doing the Z method.

$\frac{1}{4} = \frac{\quad}{20}$ $\frac{2}{3} = \frac{\quad}{15}$ $\frac{3}{5} = \frac{\quad}{25}$

$\frac{5}{9} = \frac{\quad}{45}$ $\frac{1}{2} = \frac{\quad}{8}$ $\frac{3}{4} = \frac{\quad}{12}$

$\frac{7}{8} = \frac{\quad}{32}$ $\frac{3}{7} = \frac{\quad}{28}$ $\frac{1}{10} = \frac{\quad}{50}$

$\frac{1}{5} = \frac{\quad}{30}$ $\frac{5}{6} = \frac{\quad}{24}$ $\frac{4}{7} = \frac{\quad}{14}$

$$\begin{array}{r} 23{,}456 \\ \underline{-\ 7{,}789} \end{array}$$

$$\begin{array}{r} 6{,}876{,}999 \\ \underline{+543{,}865} \end{array}$$

$5\overline{)\,25670}$

When you add and subtract fractions, as long as the denominators are the same, you add the numerators. When you have $\frac{3}{4} + \frac{1}{4}$ = What you are saying is that you have 3 parts of the pie cut into 4 pieces plus 1 part of the pie cut in 4 pieces. How many do you have altogether? 3 plus 1 equals 4 parts of the pie cut into 4 pieces. Which equals 1 whole pie.

Remember to reduce down your answer to lowest terms if the fraction can be divided by a number or if the top is bigger (improper)

$\frac{1}{5} + \frac{4}{5} =$ $\frac{5}{8} + \frac{6}{8} =$ $\frac{5}{9} + \frac{4}{9} =$

Subtract the same way:

$\frac{5}{7} - \frac{4}{7} =$ $\frac{13}{6} - \frac{5}{6} =$ $\frac{8}{3} - \frac{3}{3} =$

Circle the ODD numbers

432,234,123	543,879,900	543,876,999	543,876,567
223,876,222	123,897,000	333,333,333	777,777,778

The bus started with 6 ½ gallons of gas. When the driver add 9 ½ more gallons of gasoline, how much gasoline was in the bus?_____

The leader cut a watermelon in 16 slices. The girls at 8 of the slices. What fraction of the watermelon did they eat?_____

The girls swam and played in the water for 1 ¾ hours. Then they sat in the sun for ¾ hour. How many hours did they play and sunbathe?_____

After dinner, we had a campfire. First, we sang for $1\frac{1}{3}$ hours. Then , we told stories for $\frac{2}{3}$ hour. If we put the fire out and went to sleep at 10:30p.m., what time did we begin the campfire?_____

Our family stopped for a picnic after driving for $57\frac{1}{5}$ miles. After the picnic, we drove for another $43\frac{4}{5}$ miles before reaching the ocean. How far were we from home?_____

32 x 10,000=_____456 x 100=_____

29 x 100=_____ 343 x 10,000=_____

342	32,621	98,765	8 ⟌ 356
X 121	+32,873	-11,399	

Adding unlike fractions—reduce down to lowest terms

$\frac{1}{10} + \frac{4}{5} =$ _____

$\frac{3}{12} + \frac{1}{6} =$ _____

$\frac{1}{2} + \frac{1}{3} =$ _____

$\frac{2}{3} + \frac{1}{4} =$ _____

$\frac{5}{12} + \frac{1}{6} =$ _____

$\frac{2}{5} + \frac{9}{20} =$ _____

Change the following mixed numbers into improper fractions.

1 ¼ =_____ 3 ½=_____ 6 ½ =_____

2 ¾ =_____ 5 $\frac{1}{3}$=_____ 3$\frac{4}{5}$=_____

Change the following into a mixed number

$\frac{14}{3}$=_____ $\frac{22}{5}$=_____ $\frac{11}{5}$=_____

$\frac{11}{4}$=_____ $\frac{9}{2}$=_____ $\frac{32}{9}$=_____

Subtracting unlike fractions

$\frac{3}{5} - \frac{1}{4} =$ _____

$\frac{5}{6} - \frac{1}{3} =$ _____

$\frac{9}{16} - \frac{1}{4} =$ _____

$\frac{2}{3} - \frac{1}{12} =$ _____

$\frac{18}{25} - \frac{2}{5} =$ _____

$\frac{1}{7} - \frac{1}{14} =$ _____

Rewrite the following vertically and solve.

$\frac{8}{16} - \frac{2}{8} =$

$\frac{2}{10} + \frac{3}{5} =$

$\frac{12}{4} - \frac{9}{2} =$

$\frac{51}{10} + \frac{1}{5}$

Adding mix numbers with different denominators. Rewrite the following in vertical column form to add.

5 5/6 + 7 ¾=

10 1/7 + 3 2/3=

9 ½ + 7/8=

8 ¼ + 17 3/10=

2 4/5 + 1 ½=

1 1/5 + 2 2/3=

Whole number-mixed number subtraction—mom show you

3- 2 1/6=

A. Write the whole number as a mixed number (3=2 6/6)
B. Subtract the fractions
C. Subtract the whole numbers
D. Reduce the answer to lowest terms

Rewrite the following vertically

5 – 2 ½=

11- 2 ¾=

3- 1 ¼=

12- 4 5/7=

5 – 1/3=

9 – 3 1/3=

Adding and Subtracting Fractions

Step 1 – Find a common denominator (a number that both denominators will go into)
Step 2 – Raise each fraction to higher terms as needed
Step 3 – Add or subtract the numerators only as shown
Step 4 – Carry denominator over
Step 5 – Change the answer to lowest terms

Example #1: $\frac{1}{2} + \frac{7}{8} =$ Common denominator is 8 because both 2 and 8 will go into 8

$$\frac{1}{2} = \frac{4}{8}$$

$$+ \frac{7}{8} = \frac{7}{8}$$

$$\frac{11}{8} \text{ which simplifies to } 1\frac{3}{8}$$

Example #2: $4\frac{3}{5} - \frac{1}{4} =$ Common denominator is 20 because both 4 and 5 will go into 20

$$4\frac{3}{5} = 4\frac{12}{20}$$

$$- \frac{1}{4} = \frac{5}{20}$$

$$4\frac{7}{20}$$

Practice

Rewrite the following vertically to solve.

7/8 + 2/3=

3 2/3 - ½ =

Example : $2\frac{1}{8} = 2\frac{1}{8} = 1\cancel{2}\frac{1}{8} + \frac{8}{8} = 1\frac{9}{8}$

$-\ 1\frac{1}{4} = 1\frac{2}{8} = 1\frac{2}{8} = 1\frac{2}{8}$

$\frac{7}{8}$ **

****Note** – In this problem you must borrow from the whole number to adjust your fraction so that you can subtract. However, you may do this problem another way. Simply change the mixed number to improper form before finding the common denominator to prevent having to borrow.

$2\frac{1}{8} = \frac{17}{8} = \frac{17}{8}$

$-\ 1\frac{1}{4} = \frac{5}{4} = \frac{10}{8}$

$\frac{7}{8}$

A. Write as an improper fraction.

1. $1\frac{1}{8}$ _____ 2. $4\frac{1}{5}$ _____ 3. $1\frac{2}{3}$ _____ 4. $2\frac{3}{16}$ _____

5. $2\frac{5}{7}$ _____ 6. $2\frac{1}{16}$ _____ 7. $1\frac{5}{8}$ _____ 8. $3\frac{4}{5}$ _____

9. $7\frac{1}{4}$ _____ 10. $5\frac{2}{3}$ _____ 11. $3\frac{5}{6}$ _____ 12. $6\frac{1}{2}$ _____

Write as a mixed number.

1. $\frac{10}{4}$ _____ 2. $\frac{19}{2}$ _____ 3. $\frac{25}{3}$ _____ 4. $\frac{9}{8}$ _____

5. $\frac{25}{16}$ _____ 6. $\frac{35}{4}$ _____ 7. $\frac{7}{3}$ _____ 8. $\frac{21}{8}$ _____

9. $\frac{4}{2}$ _____ 10. $\frac{12}{7}$ _____ 11. $\frac{17}{4}$ _____ 12. $\frac{48}{9}$ _____

Write in lowest terms.

1. $\frac{6}{32}$ _____ 2. $\frac{21}{35}$ _____ 3. $\frac{18}{24}$ _____ 4. $\frac{12}{15}$ _____

5. $\frac{5}{30}$ _____ 6. $\frac{9}{27}$ _____ 7. $\frac{14}{49}$ _____ 8. $\frac{8}{32}$ _____

5. $1\frac{12}{21}$ _____ 10. $2\frac{16}{20}$ _____ 11. $5\frac{8}{14}$ _____ 12. $3\frac{10}{25}$ _____

B. Add or subtract as shown.

1. $\frac{3}{8} + \frac{7}{8} =$

2. $\frac{2}{3} + \frac{3}{4} =$

3. $\frac{3}{32} + \frac{1}{8} =$

4. $\frac{3}{5} + \frac{5}{6} =$

5. $\frac{5}{8} + \frac{1}{10} =$

6. $\frac{3}{8} + 1\frac{1}{4} =$

7. $\frac{1}{4} + \frac{1}{5} =$

8. $2\frac{1}{8} + 1\frac{1}{4} =$

9. $1\frac{5}{8} + \frac{13}{16} =$

10. $2\frac{2}{3} + \frac{4}{9} =$

More practice☺

$\frac{9}{10} - \frac{3}{16} =$

$\frac{7}{8} - \frac{1}{2} =$

$\frac{11}{16} - \frac{1}{4} =$

$\frac{5}{6} - \frac{1}{5} =$

$\frac{7}{8} - \frac{3}{10} =$

$1\frac{1}{2} - \frac{3}{32} =$

$5\frac{5}{6} - 2\frac{3}{9} =$

$3\frac{2}{3} - 1\frac{7}{8} =$

$2\frac{1}{4} - \frac{5}{6} =$

$4\frac{5}{6} - 1\frac{1}{2} =$

REVIEW

$\frac{2}{3} = \frac{\quad}{15}$ reduce to lowest terms. $\frac{9}{12} = \frac{\quad}{\quad}$ $\frac{18}{54} = \frac{\quad}{\quad}$

Compare using < >

$\frac{13}{27}$ $\frac{12}{27}$ $\frac{5}{6}$ $\frac{3}{4}$ $2\frac{3}{4}$ $\frac{13}{4}$

Add or subtract. Rewrite if necessary.

1/5 + 2/5= 3/8+2/8= ¾+1/2=

7/8-3/4= 5 ½ +2 ½ = 2 1/8- 1 5/8=

21/5-21/10= 5 1/6+3 2/4= 5/3+2/5=

Draw a picture of each fraction:

3 ¼ 10/3

Multiplying Simple Fractions

Step 1 – Multiply the numerators
Step 2 – Multiply the denominators
Step 3 – Reduce the answer to lowest terms

Example: $\frac{1}{7} \times \frac{4}{6} = \frac{4}{42}$ which reduces to $\frac{2}{21}$

H. Multiplying Mixed Numbers

Step 1 – Convert the mixed numbers to improper fractions first
Step 2 – Multiply the numerators
Step 3 – Multiply the denominators
Step 4 – Reduce the answer to lowest terms

Example: $2\frac{1}{3} \times 1\frac{1}{2} = \frac{7}{3} \times \frac{3}{2} = \frac{21}{6}$ which then reduces to $3\frac{1}{2}$

The best way to multiply fraction is to reduce down before you multiply. Then multiply across

$\frac{\cancel{3}}{\cancel{9}} \times \frac{1}{\cancel{6}} = \frac{3}{2} = 1\frac{1}{2}$

$\frac{\cancel{12}}{2} \quad \frac{\cancel{3}}{1}$

The 6 and the 12 can be reduced by 6. So you cross of the 6 and make it 1. The 12 becomes 2. 9 and 3 can be divided by 3, so you cross off and make it 3 and 1. You can't reduce anymore so you just multiply across. You get 3/2 and since that is an improper fraction, you reduce it down to lowest terms. When you reduce, it can be either number up and down, not reducing side by side. Let's try doing some on your own. Remember reduce FIRST and then multiply across.

$\frac{3}{4} \times \frac{12}{9} =$ _____ $\frac{10}{5} \times \frac{9}{3} =$ _____ $\frac{4}{9} \times \frac{18}{20} =$ _____

$\frac{3}{8} \times \frac{8}{4} =$ _____ $\frac{8}{20} \times \frac{30}{8} =$ _____ $\frac{5}{10} \times \frac{2}{3} =$ _____

Dividing of fractions

When you are to divide fractions, you actually do the reciprocal of the second number and then multiply as usual.
Reciprocal means to flip the fraction around.

$\frac{1}{2} \div \frac{6}{3}$= Rewrite $\frac{1}{2} \times \frac{3}{6}$= Then reduce $\frac{1}{2} \times \frac{\cancel{3}^{1}}{\cancel{6}_{2}}$= $\frac{1}{4}$

$\frac{3}{4} \div \frac{9}{12}$=_____ $\frac{10}{5} \div \frac{9}{3}$=_____ $\frac{4}{9} \div \frac{20}{18}$=_____

$\frac{3}{8} \div \frac{4}{8}$=_____ $\frac{8}{20} \div \frac{8}{30}$=_____ $\frac{5}{10} \div \frac{3}{2}$=_____

When you have a whole number by itself and you need to multiple or divide, put it over 1.
7 x ½ = $\frac{7}{1} \times \frac{1}{2}$=

Solve:
7 x$\frac{1}{11}$ =_____ $\frac{1}{5}$x4=_____ $\frac{1}{9}$x$\frac{1}{8}$=_____

12 x $\frac{1}{4}$=_____ $\frac{1}{100}$x$\frac{1}{100}$=_____ $\frac{2}{3}$x$\frac{6}{8}$=_____

Multiplying with mixed numbers

$\frac{1}{2}$x $8\frac{3}{4}$ =_____ $\frac{2}{5}$x$2\frac{1}{12}$=_____

$\frac{11}{12}$x$11\frac{1}{3}$=_____ $8\frac{2}{3}$X$\frac{1}{4}$ = _____

7 ½ X $\frac{8}{9}$=_____ 5 ¼ X$\frac{12}{7}$=_____

Dividing of fractions

When you are to divide fractions, you actually do the reciprocal of the second number and then multiply as usual.
Reciprocal means to flip the fraction around.

$\frac{1}{2} \div \frac{6}{3}$= Rewrite $\frac{1}{2} \times \frac{3}{6}$= Then reduce $\frac{1}{2} \times \frac{\cancel{3}^{1}}{\cancel{6}_{2}}$= $\frac{1}{4}$

$\frac{3}{4} \div \frac{9}{12}$= _____ $\frac{10}{5} \div \frac{9}{3}$= _____

$\frac{4}{9} \div \frac{20}{18}$= _____ $\frac{3}{8} \div \frac{4}{8}$= _____

$\frac{8}{20} \div \frac{8}{30}$= _____ $\frac{5}{10} \div \frac{3}{2}$= _____

$\frac{1}{2} \div \frac{3}{10}$= _____ $\frac{4}{9} \div \frac{2}{3}$= _____

If baseball cards are worth $\frac{1}{10}$ of a dollar each, how much are 54 cards worth?_____

Phil used $\frac{2}{3}$ cup of cheese for each pizza. He made 4 pizzas, how much cheese did he need to buy?_____

At the track meet, Sarah entered 5 sprint contests. If each race was ¼ mile long, how many miles did Rick sprint in all?_____

This year's summer vacation was $\frac{1}{6}$ of the year. How many months long was the summer vacation this year?_____

Greg's dog was asleep $\frac{2}{3}$ of the day. How many hours was it awake?_____

Fractions: multiplication and division

$\frac{7}{9}$ x $\frac{1}{4}$=_____ $\frac{5}{6}$ x $\frac{1}{10}$=_____

$\frac{9}{10}$ x $\frac{2}{3}$=_____ 8 x $\frac{1}{4}$=_____

$\frac{1}{3}$ x 15=_____

James sat in his chair for $\frac{5}{6}$ of an hour. For $\frac{1}{3}$ of this time, he worked on his assignment. What fraction of an hour did he work this assignment?_____

$\frac{1}{2}$ ÷ $\frac{1}{5}$=_____ $\frac{7}{16}$ ÷ $\frac{4}{7}$=_____

$\frac{3}{4}$ ÷ $\frac{3}{8}$=_____ $\frac{4}{20}$ ÷ $\frac{2}{10}$=_____

REVIEW

Compare using < > =

$\frac{3}{5}$ _____ $\frac{4}{5}$ $\frac{7}{8}$ _____ 1 $\frac{4}{16}$ _____ $\frac{1}{4}$

$\frac{1}{9} + \frac{5}{9} =$____ $\frac{2}{5} + \frac{1}{10} =$_____ $\frac{3}{8} + \frac{1}{6} =$ _____

$3\frac{1}{4} + 2\frac{1}{3} =$_____ $11\frac{7}{8} + 4\frac{5}{12} =$_____

Change $\frac{17}{4}$ into a mixed number:_____

Change $3\frac{2}{5}$ into an improper fraction:_____

$\frac{3}{4} \times \frac{1}{2} =$_____ $\frac{11}{12} \times \frac{4}{5} =$_____

$\frac{2}{3} \div \frac{1}{3} =$_____ $\frac{1}{2} \div \frac{1}{4} =$_____

What is the VALUE of the underlined digit:

323,876,90<u>0</u>,987_____ _<u>5</u>43,876,900_____

321,546,7<u>8</u>9,987_____123,345,36<u>7</u> _____

4<u>3</u>6,987,890,000_____6<u>8</u>9,987,908_____

Place commas where they are needed:

342786543213 675456789 87658909776 54555555555

7654323456687 767655677788 876655545 7777777

How many hours in one day?_____ how many in 2 days?_____
How many days in one week?_____how many in 4 weeks?_____

How many days in one year?_____how many in a leap year?_____

How many years in a decade?_____how many years in a century?_____

Listening skills

Give this to Mom and have her read it to you. Leave some space in between questions

1. Write out the equation $\frac{3}{4}$ plus 9/4
2. Write out the equation 7/9 minus 13/9
3. Write out the equation $\frac{3}{4}$ times 12/9
4. Write out the equation 2/3 divided by 10/3
5. Write the number 321,678,999,222
6. How many sides does a pentagon have
7. How many sides does a hexagon have
8. How many sides does an octagon have
9. Draw an acute angle
10. Draw an obtuse angle
11. Draw a right angle
12. Draw a line AB
13. Draw a line segment BC
14. Draw a ray RT
15. Draw a symmetrical triangle
16. Now solve the first 4 problems then hand it to mom

Decimals

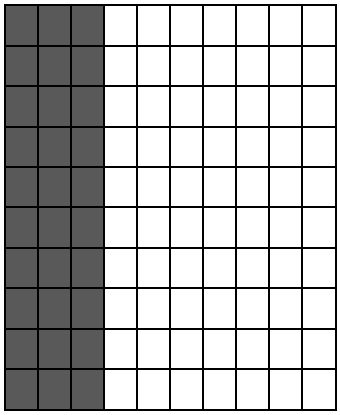
Decimals and fractions are both systems for naming parts of a whole. Just as numbers to the left of the decimal have place value, so do numbers to the right. The first place is the tenths place. (0.5= five tenths).
The second place to the right is the hundredths place (.03= three hundredths.)
The third place to the right is the thousandths place (0.008= eight thousandths).
It can keep going infinitely just like it does to the right.

For example. Once slice of pizza that is cut into ten pieces can be represented as $\frac{1}{10}$. This same quantity can be represented in decimal form as 0.1 (read one tenth). Five slices of the same pieces can be written as $\frac{5}{10}$ or 0.5 (read as five tenths).
Fractions with 100 parts such as pennies are written with a denominator of 100. Seventy five pennies is $\frac{75}{100}$ of a dollar in fraction form and 0.75 in decimal form. Eight pennies can be written as $\frac{8}{100}$ or 0.08. The placement of the 8 is very important. A misplaced decimal point can change . 08 to 0.8

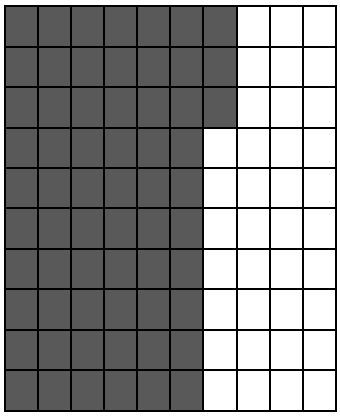
Always read a decimal as a fraction. Read 3.14 as (three and fourteen hundredths) not as three point fourteen or three point one four. The word "and" is used to separate the whole number from the decimal fraction. Read 214.37 as "two hundred fourteen and thirty seven hundredths"

Color in the base ten square to represent a decimal fraction.

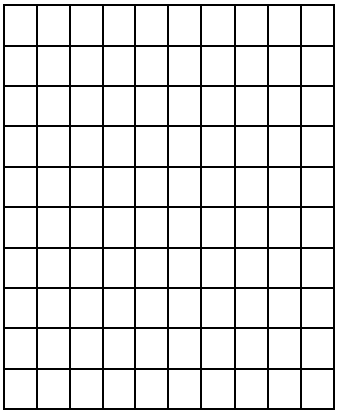
0.3 (three tenths)

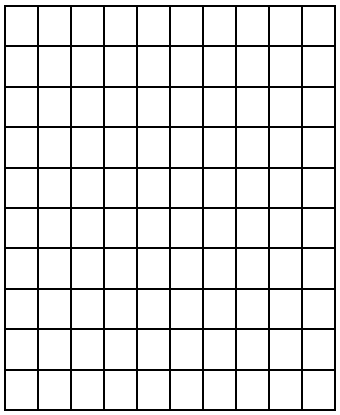


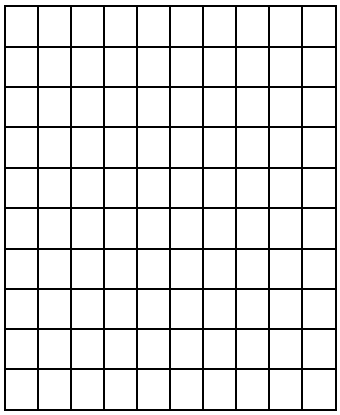
0.63 (sixty-three hundredths)

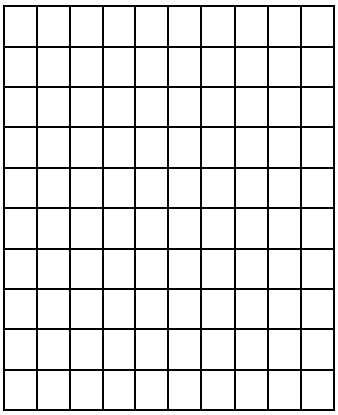


Try shading in the following base ten charts with the correct numbers 0.4 0.11 0.59

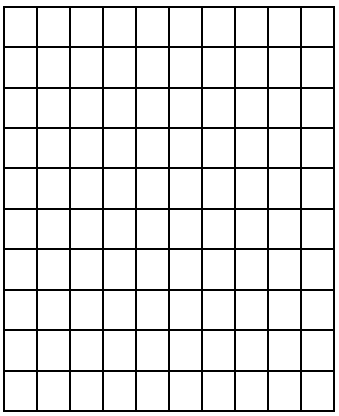




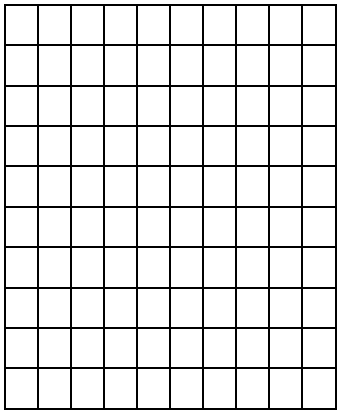




Shade 0.37

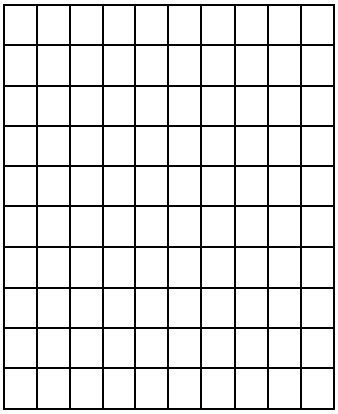


shade 0.04



shade 0.7

The decimals 0.3, 0.30, and 0.300 each represent three tenths.



Shade 0.3.
Now shade 0.300 what happens?
$\frac{3}{10}$ is the same as $\frac{3}{100}$. One is just simplified or reduced down. Can you see that?

Lets write equivalent fractions for the following given decimals.

Example 0.45 = $\frac{45}{100}$ or $\frac{450}{1000}$ or $\frac{9}{20}$

0.5_____ 0.9_____0.7_____

0.1_____0.57_____0.012_____

0.34_____0.03_____0.125_____

To compare decimal fractions look at one digit at a time.

a) Start with the whole number. The decimal with the larger whole number is greater number. 3.87 > 1.87. if the whole numbers are the same, move right to the tenths place.
b) Compare the tenths. The decimal with the larger number in the tenths place is greater number. 5.6> 5.59. If tenths are equal move to the hundredths place.
c) Compare the hundredths. The decimal with the larger number in the hundredths place is greatest. 6.37>6.368
d) Keep going

Write < > or =

0.31_____0.20 0.090_____0.09 0.33_____0.3

2.001_____2.01 0.03_____0.3 6.02_____602

9.909_____9.90 .0053_____0.53 0.87_____0.7643

When adding or subtracting decimals, just make sure to line up the numbers. If you need to add some zeros as place holder you can.

24.523	45.98	765.7645
+5.754	- 9.65	-456.8751

Add the following numbers: line up the decimals 43.20 + .04 + 2.876=_____

Subtract the following numbers, add zeros if needed: 42.87- 4.769=_____

Subtract. 754.86-7.8201=_____

Reading and writing decimals and Decimals as fractions

Practice writing decimals in words. 0.29 is twenty-nine hundredths : 4.7 is four and seven tenths; Notice that you do not reduce the fractions in decimals. All decimals have a denominator of 10,100, 1000, 10,000, etc.

Practice writing decimals as fractions and fractions as decimals. $\frac{23}{100}$ is 0.23, and 0.03 is $\frac{3}{100}$

Write the following decimals in digits:

Twenty-three hundredths_____forty-one hundredths_____

Five and three tenths_____ Five hundred twenty-three thousandths_____

Six and seven tenths_____two hundred thirty-one thousandths_____

Write the following as fractions:

0.45_____ 0.87_____ 0.4_____

0.654_____ 0.8_____ 0.76_____

Write the following as decimals:

$\frac{29}{100}$_____ $5\frac{5}{10}$_____ $\frac{234}{1000}$_____

$3\frac{23}{100}$_____ $4\frac{9}{1000}$_____ $245\frac{23}{100}$ _____

Add or subtract

43.76+2.07+0.04=_____ 56.87-5.321=_____

Because the decimal point shows you the value of each digit in a decimal, you can add zeros after the last digit of a decimal without changing its value. You can add zeros before the decimal point. All the decimals below are equal.

0.5 =0.50 =00.50 =00.500 =.5

No matter how many zeros are added after the decimal point, the decimal point shows that 4 is in the one's place

4=4.0=4.00=4.000

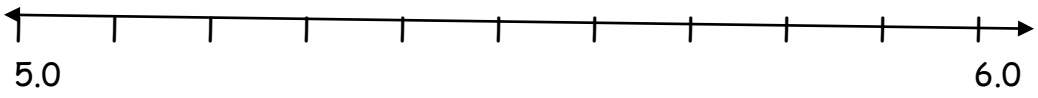
Learn to simplify decimals that have extra zeros

0.240= .24

38.00= 38

If you have 38.01 you cannot simplify that, ONLY if the zeros are to the right after the numbers

Reading decimals on a number line



Can you find on the line where 5.3 would be? How about 7.2?
Since it is divided into 10 parts, each part is 1/10 of a mark. 5.1 then 5.2 then 5.3 etc

Comparing decimals

Remember when you compare numbers, you start with the greatest place value.
Compare 8.82 and 8.98 compare the ones place 8=8
Compare the tenth's .8< .9
Then 8.82<8.98

7.77____8.98 7.07_____7.77 4.99_____4.999

3.343____3.043 58.765_____58.766 .878_____.888

54.87____5.487 84.88_____8.855 432.876____876.9

8.004_____7.40000 4.540_____4.05400 3.0004_____3.4000

6.000_____6 .333300_____.3333 44.444_____44.4440

Here are some problems. Write them out and line up the decimals. If you need to add some zeros.

432.8 +32.005 +1.001=

32.001+2.4+27.24=

34.87-4.49=

34.00-24.64=

44,872.876+54,853.321=_____

64,864.21-32,009.87=_____

To convert a decimal to a fraction, remove the decimal point and write the decimal over a power of ten. If the decimal goes to the tenths place, place it over ten; if the decimal goes to the thousandths place, place it over 1000. Reduce the fraction to lowest terms.

Examples: $0.45=\frac{45}{100}=\frac{9}{20}$ $0.007=\frac{7}{1000}$

Convert the following decimals into fractions.

0.23=_____ 0.11=_____0.87=_____

0.543=_____ 0.220=_____0.137=_____

4.2=_____ 5.22=_____ 8.25=_____

89.50=_____ 76.454=_____126.777=_____

Add 65.87+43.897=_____

Subtract 6484.99-0.9548=_____

Write out 36.125 in
words:_____
_____

Write two hundred thirty-seven and twenty-one hundredths in numerals
_____

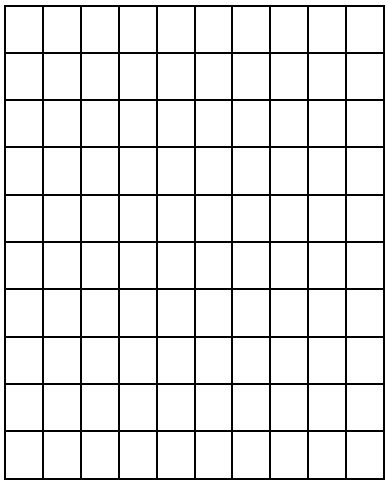
Use < > to indicate which decimal fraction is greater

3.147_____3.205 3.06_____3.059

Round 87.658 to the nearest whole number _____
Round 87.658 to the nearest tenth._____
Round 87.658 to the nearest hundredth _____

Write 0.5 as a fraction in lowest terms _____
Write 0.67 as a fraction in lowest terms_____
Write 7.85 as a fraction in lowest terms_____

Fill in 0.37



8.276-0.228=_____ 465.52-104.1=_____

To estimate the addition and subtraction of decimal fractions, first round to the nearest whole number. Then add or subtract as usual.

34.356	34
+22.511	+23
	57

Estimate the following.

42.88	54.889	549.432
+33.66	-17.99	- 17.87654

We multiplied money before, remember I said to count over how many decimal places there was in your numbers and that is how many you move over in your answer. The same is true for decimals.

4.3
X1.2
8 6
4 3 0
5 .1 6

Do the following problems and put the decimal point in the proper place.

2.21	2.5	3.1
x.15	x2.1	3.1

6.6432	4368.3216	0.87
X 0.3	x 0.2	x .04

Decimal division

You divide decimals by whole numbers the same way you divide whole numbers by whole numbers. You put the decimal point in the quotient above the decimal point in the dividend. Answers can go to the right 3,4 places unless noted. Add zeros to the dividend—ask your teacher

$$6\overline{)\,18.6}\quad 3.2$$

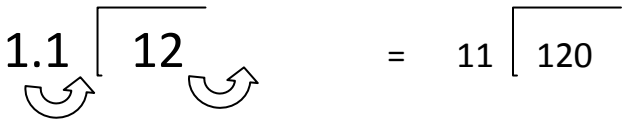
Practice

$4\overline{)\,12.8}$ $5\overline{)\,20.55}$ $2\overline{)\,84.12}$

$3\overline{)\,12.24}$ $8\overline{)\,.860}$ $6\overline{)\,4.56}$

$6\overline{)\,0.367}$ $4\overline{)\,15.48}$ $8\overline{)\,7.24}$

In decimal division, the divisor must be a whole number. The decimal point must be moved to the right until the divisor is a whole number, but you cannot make a change in the decimal divisor without making the same change to the dividend. If you moved the decimal one place to the right, you have multiplied the divisor and the dividend by 10. Place the decimal point in the quotient directly above the newly placed decimal point in the dividend. Think of the division problem 3.4 ÷ 1.2 as a fraction $\frac{3.4}{1.2}$ multiply both the numerator and the denominator by 10 to make an equivalent fraction. The new (equivalent) division problem is 34 ÷12



8. 4 ÷ 2.1=_____ 1.872 ÷ 0.36=_____

0.4712 ÷ 1.24=_____ 1.12 ÷ 8.1=_____

17.7 ÷ 0.3=_____ 12.52 ÷ 0.05=_____

Remember when we learned how easy it was to multiply by 10,100,1000, etc? just add the same amount of zeros right?

In decimals and multiplying by 10, 100, 1000 etc, you move the decimal to the right the amount of zeros. If you need to add more zeros do so.

In dividing by 10,100,1000 you move the decimal to the left the same amount of zeros. If you need to add more zeros do so.

Ex. 34.87 x 100= 3487 0.67 x 1000= 670

93.79 ÷ 100= 0.9379 643 ÷ 10000= 0.0643

4.2876 x 100=_____ 0.65 x 1000=_____

654.875 x 10000=_____ 0.654 x 10=_____

58.9x 1000=_____ 76.6 x 10000=_____

76.976 ÷100=_____ 0.654 ÷ 10=_____

65.87 ÷ 1000=_____ 7.643 ÷ 10000=_____

9.98 ÷ 10000=_____ 8.065 ÷ 100=_____

Write the following in digits:

Forty-three and seven tenths _____

One hundred twenty seven and thirteen thousandths._____

REVIEW

Write 207.426 in words

_____

_____

Write forty-seven and thirteen thousandths in numerals _____

Use < > to indicate which decimal fraction is greater 17.35 _____17.295

Round 12.769 to nearest whole number _____

Round 12.769 to nearest tenth _____

Round 12.769 to nearest hundredth _____

Write 0.36 as a fraction in lowest terms_____

Write 0.25 as a fraction in lowest terms _____

Write ¾ as a decimal number _____

Solve

36.2 + 27.325=_____

87.36-84.95=_____

4.6 x1.2=_____

3.46 x 10=_____

11.55 ÷ 7=_____

39 ÷ 12=_____

367.52 ÷ 10=_____

6.743 ÷ 100=_____

0.432 x 100=_____

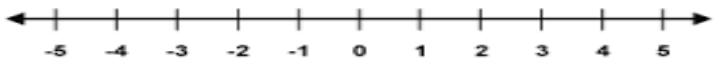
Positive and Negative numbers

On a Celsius thermometer, zero degrees is the temperature at which water freezers. A common room temperature is +20 and -10 is the outdoor temperature of a very cold winter day.

The number +20 or 20 is a positive number. You read it as positive 20 or just 20.
The number -10 is a negative number. You read it as negative ten.

You can write positive numbers with or without a + sign. BUT you MUST always write a negative sign with a negative number.

We can show positive and negative numbers on a number line.



Numbers to the left of 0 on the number line are negative. Numbers on the right of 0 are positive. The number 0 is neither positive or negative.

Whole numbers are called integers. The positive integers are +1,+2,+3… the negative integers are -1,-2,-3…..

We use integers in everyday life. For instance the ten dollars you earn for doing a job is an example of a positive integer. When you spend the money on treats. That number is the negative amount you spend.

To mark the sea floor 300 meters below sea level, we can use the negative integer -300 to mark it. To mark a mountain 3,200 feet above sea level, we use +3200.

Comparing integers

An integer on the number line is greater than those to its left and less than those to its right.

$-6 < -3 < 3$

A positive integer is always greater than a negative integer. The farther to the left of a negative integer is from zero, the smaller its value.

Practice

-3_____-2 4_____-4 -6_____-5 +3_____+6

+2_____-2 -8_____-6 +10_____8 -5_____-10

Round the following to the nearest tens

328_____ 543_____ 788_____ 99_____

Nearest hundred

432_____ 655_____ 899_____ 2342_____

Nearest thousand

34532_____ 6543_____ 8997_____54322_____

Nearest ten thousand

43233_____ 56555_____ 76888_____ 765789_____

Nearest tenth

63.87_____ 8.057_____7.009_____ 21.65_____

Nearest hundredth

654.754_____876.5328_____76.987_____0.891_____

Nearest thousandths

0.6547_____34.7623_____98.9997_____0.3289_____

$11\overline{)2432}$ $20\overline{)56740}$ $3\overline{)3.246}$

Put these decimals in order from largest to smallest:

32.45 33.4 31.55 78.1 32.09

Put these in order from smallest to largest:

3.45 76.88 2.001 3.03 3.43 03.451

Add these decimals. Fill in the zeros:

32.32+43.001+54.01=

Subtract
432.98-32.021=

75.32 x2.1=

Compare < > =

43.76_____43.99 323.876_____654.98 32.04_____32.40

678.890____678.891 432.55_____432.55 432.8_____432.0

-43_____43 -876_____-976 -876_____-887

What is the perimeter:

Measure around something with a ruler. Draw what it is here and mark dimensions. Then solve. Perimeter is _____

What is the area of a rectangle whose sides are 25 ft by 7 ft wide?_____
A=l x w that is the formula to memorize

What is the area of a room whose dimensions are 17 ft by 12 ft?_____

What is the area of the counter top that measures 36 in. by 22 in.?_____

What is the area of our park that measures 4.5 miles by 2.3 miles?_____

I want you to imagine that I am going to give you $75 to spend on Amazon. Do some shopping (pretend) and come up with three different scenarios of what you can buy without going over. Imagine free shipping.

1	2	3

Jenny has 18 rabbits which she is selling for $2.99 each. How much money will she earn if she sells all 18 rabbits?_____

You bought a parrot for $2.39 and a bird for $8.67. What was your total cost?_____

Kyle is selling 12 goldfish for $.84 total. How much does he get for each goldfish?_____

I bought a ribbon snake for the classroom. It costs $4.79. how much change do I get from a $20.00 bill?_____

Jadyn is selling a pet python for $9.99. a kitten costs $13.45 what is the difference in their prices?_____

Misty bought 60 guppies for church carnival and spent $23.40. How much did each guppy cost?_____

Jeff sold 10 geckos for $2.99 each. How much did he receive for all 10?_____

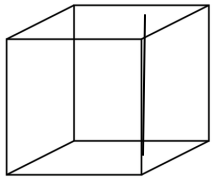
I bought a treat at the store today. An ice cream cost me $2.49 and a soda cost me $1.89. how much did I spend in all?_____

Lets keep track of your money. Fill in the following as a bank ledger.

You receive your first royalty check for $1000.00 and deposit it in your checking account. Here is your opening balance	$1000.00
You go directly to the music store and spend $234.56 on Jamie Grace cds and other things. What is your balance?	
You decide to buy some new clothes. The total spent at the mall was $389.09. what is your balance?	
Your next royalty check comes and you deposit $1,712.34.	
Now with your new check, you decide to buy that new mountain bike for $667.09. What is your balance?	
You buy your mother some perfume for a present. You write a check for $37.89. what is your balance now?	
You need a new pair of running shoes, as yours got ruined in the mud. They cost you $203.45. what is your balance?	
You decide to take your family out for pizza tonight. The bill is $56.17 what is your balance now?	
You buy a new iPhone and it costs you $143.88 a month. What is your new balance?	
You deposit your latest royalty check, which amounts to $4,451.01. what is your new balance?	
To celebrate your good fortune, you decide to take your entire family to Dolly wood. This costs you a mere $3,987.76. what is your new balance?	

How do we find out how much will fill a container? We need to find the volume of an object. That sort of object needs to be 3d. Imagine a cube, how much could we fit inside of it? We figured that out by using this formula Volume= length x width x height

The height inside is 3



width 3 inches To find the volume we take 3x3x2=18 inches cubed or 18 in^3

Length 2 inches

Remember V=l x w x h

What is the volume of a cube with dimensions 4 ft, 2 ft, 3 ft=_____

The dimensions are 13 in length, 9 in. width, and 2 in height. What is volume_____

Remember A=l x w What is area_____

The dimensions are 8 ft in length, 4 ft in width, and 3 ft in width. What is the volume_____

What is the area _____

Mental math time…….give this to mom and write the answers.

1. How many hours are in one day
2. How many weeks in a month—usually
3. How many days in two weeks
4. How many days in a year
5. How many months in a year
6. How many seconds in one minute
7. How many inches in one foot
8. How many feet in one yard
9. How many centimeters in one meter
10. How many millimeters in one centimeter
11. How many quarts in one gallon
12. How many pints in one quart
13. How many cups in one pint
14. How many feet in one mile
15. Write the number 43,275,890,876
16. Write the number 321,456,700
17. What number is in the hundreds place in 345,876
18. Write the decimal for .37
19. Write the decimal for 2.456
20. Draw a ray
21. Draw a line
22. Draw a line segment
23. Draw a pentagon
24. Draw a hexagon
25. Draw an octagon

1. Jentzen had 2,834 legos, but he lost 18. How many legos does he have now?

2. Stephen baked 120 muffins. Jadyn baked 11 times as many. How many muffins did Jadyn bake?

3. There are 12, 240 books in a library. They are arranged on shelves that hold 8 books each. How many shelves are in the library?

4. Sam has 1850 crayons. Sarah has 739 crayons. How many more crayons does Sam have than Sarah?

5. Brad has 10,000 balloons, 624 of them are red and the rest are green. How many green balloons does he have?

6. 21 people are going to the zoo. There are 3 vans to take people to the zoo. How many will go in each van if the same number go in each van and all of the people go to the zoo?

7. I have 54 cents to buy candy. If each piece of bulk candy costs 3 cents, how many gumdrops can I buy?

8. Autumn had 3 packages of cupcakes. There are 4 cupcakes in each package. She ate 5 cupcakes. How many are left?

8. 19 children take a mini bus to the zoo. They are to sit 2 or 3 to a seat. There are 7 seats. How many seats will have 3 children seated on them?

9. Mike put his toys into boxes. He put 250 toys equally into 5 boxes. How many toys did he have in each box?

1. my dog had some bones. Then he dug up 367 bones. Now he has 800 bones. How many bones did he start with?

2. Carol had 1,280 dolls and Sarah had 2,987 dolls. If they put them together how many will they have?

3. Joe was walking through the park and saw a flock of 342 birds flying by. How many wings were in the flock??

4. Lucy was in the hospital and she got 459 cards from around the world. When she got home she got 294 more. How many cards did she get?

5. Collin is 18 years old. His grandmother is 6 times as old as he. How old is the grandmother?

6. Evan bought some new clothes. He bought eighteen shirts that cost $8 each, nineteen pants that cost $5 each, and thirteen jackets that cost $10 each. How much did he spend in all?

7. I counted all the pockets I had on my clothes today. Altogether I had 27. I had eight on my shirt and fourteen on my pants. How many pockets were on my coat?

8. George scored 155 goals playing soccer last season. This season he scored 178. What is the total number of goals George scored?

9. Sam needs to read a 567 page book for school. He has already read 147 pages. How many pages does he have left?

1. Wesley made 88 baskets on Monday. He made 219 on Tuesday. How many baskets did he make in all?

2. Amy picked 376 apples, Greg ate 218 of them. How many apples are left?

3. Lauren has 265 bottles of nail polish. Riley had 176 bottles. How many more bottles does Lauren have than Riley?

4. Sadie ate 678 dog bones last year. Polar ate 243 last year. How many more bones did Sadie eat than Polar?

5. Amy spent $57.98 on food. Danielle spent $25.76 + $17.01 on her food. Who spent more and how much more?

6. I spent the following: $9.17 on Monday, $ 2.43 on Tuesday, $5.43 on Wednesday, $12.43 on Thursday, and $5.00 on Friday. How much more did I spend on Monday than Friday?

How much did I spend altogether?

7. Sam bought 900 pieces of paper. He used 178 pieces. How many pieces of paper does he have left?

8. Bobbie bought a hot dog for $1.75 and a bag of chips for 75 cents. Sheila bought 2 hotdogs and 2 bags of chips. How much more money did Sheila spend than Bobbie?

1. Kim read that North America covered an area of 9,365,290 miles and Europe covered 3,873,082 square miles. How much bigger is North America than Europe?

2. Greg looked at his car's odometer before a trip. It showed that he had traveled 212.3 miles. When he stopped for lunch, the odometer read 372.0. how many miles had he traveled?

3. Sam ate 1 ½ of pepperoni pizza and 3 ½ of sausage pizza. How much did he eat in all?

4. Linda needs to be at work by 9:00 am. It takes her 10 minutes to shovel her car out of snow, 25 minutes to prepare for the day, and 20 minuts to drive to work. What time should she wake up so she can get to work on time?

5 Madelyn bought 3 hotdogs, 2 servings of nachos, and 4 pizzas. Each of the items cost $1.50. How much did she pay for all the food.

6. Austin bought 4 pizzas with 8 slices each. He and his friends ate 21 slices of the pizza. How many slices were left?

7. Mr. Peabody gave 50 cents to each student. If there are 54 students, how much did Mr Peabody give away?

Prices for the game

Pizza	1.25
Chips	.75
Pop	.50
Candy	.25
Nacho	1.50
Hot dog	1.00
Salad	4.50
Hamburger	2.50

1. I bought hamburger, hotdog, 2 chips, and 2 pops. How much did I spend?

2. Amy bought a salad, 3 pops, 2 hotdogs, and 4 candies. How much did she spend?

3. Stephen got a hotdog and chips. Jentzen bougth 3 hotdogs and 1 pop. How much more did Jentzen spend?

4. Sarah bought 20 pieces of candy and 5 bags of chips. How much did she spend?

5. We sold 25 nachos on Monday, 45 on Tuesday and 20 on Wednesday. How much did we make in dollars on the nachos?

6. Karen bought a hotdog, chips, and a pop. Randall bought a hamburger, nachos, 2 pops and 3 chips. How much did they spend altogether?

7. I want one of each of the items. How much will it cost me?

1. You give 1/3 of the pan of brownies to Sam and 1/6 of the pan to Mike. How much of the pan of brownies did you give away?

2.You go for a walk. You walk $\frac{3}{4}$ mile and then sit down to take a rest. Then you walk 3/8 of a mile. How far did you walk total?

3.Pam walks 7/8 of a mile to school. Paul walks $\frac{1}{2}$ of a mile to school. How much farther does Pam walk than Paul?

4. Betty made two types of cookies. She used 2/3 cup of sugar for one recipe and $\frac{1}{4}$ cup of sugar for the other. How much sugar did she use in all?

5. Of the 86 children in 5^{th} grade, 3/5 went to the parties. How many students went to the parties in all?

6. 30 people watched the football game last night. Tickets cost $2.75 each. Half of these fans bought a program at $1.50 each. How much money was collected altogether?

7.In summertime, you can earn $5 a day cutting grass. How many days will it take you to earn $125?

8. Arthur baked 115 muffins, which is 24 more than Anna. How many muffins did Anna bake?

The turtle at the zoo weighs 145 pounds. It is 5 times heavier than the baby turtle. How much does the baby turtle weight?

2. John makes $4.75 an hour at his work. If he works 6 hours, how much money will he earn?

3. Baby Jack plays with blocks. Each block is 2.4 inches tall. He has a collection of 42 blocks. If he could stack them on top of each other, how tall will the tower be?

4. Jim rides the bus to school each day. A round trip is 5.2 miles. How many miles does he go in 4 days?

5. Amy baked 6 dozen cookies. She sold them for $4 per half dozen. How much would she make if she sold them all?

6. Collin noticed two rides were 33 feet apart. How many yards is that?

7. My table is 288 inches long. How many feet is that?

8 Collin drank 64 ounces of coffee. How many cups is that?

9. Collin is 85 inches tall. How tall is he?

We have already learned about decimals and fractions are two different ways of writing the same numbers. A percent is simply another way of expressing hundredths. In a bag of 100 marbles, 25 red marbles represents 25%. To demonstrate percents, use the same hundredth models used with fractions and decimals.

The fraction $\frac{35}{100}$ is easily written as a percent = 35%

The fraction $\frac{4}{25}$ must first be rewritten as an equivalent fraction before it can be written as a percent.

$\frac{4}{25} = \frac{16}{100} = 16\ \%$

Since percents are fractions of 100, they can be written as decimal fractions to the hundredths place.

$36\ \% = \frac{36}{100} = 0.36$

Here are some examples of practical percent problems.

a) The company invited its 240 employees to a picnic, if 75% came to the picnic, how many employees showed up? (180)
b) Mike's little league team won 25% of the 16 games they played this year. How many games did they win (4)
c) Jadyn bought a computer at a 30 % discount. If the computer originally cost $1200.00 how much did she pay for it?($840)
d) If Brooklyn read 60% of her 300 page book, how many pages does she have left?(120)

Situation	Fraction	percent
30 marbles out of 100 marbles are red	$\frac{30}{100}$	30%
29 people out of 100 voted		
10 fish out of 100 fish are tropical		
7 cats out of 100 cats live indoors		
4 turtles out of 100 turtles lay eggs		
7 out of 10 puppies had spots		
17 out of 25 rules are blue		
18 out of 20 goldfish are orange		
The dress was reduced from $5 to $20		

Percent

The term percent means "per hundred". A percent compares a number to 100. For example 30 percent means 30 out of 100 or $\frac{30}{100}$. The symbol % stands for a percent. You write 21 out of 100 as 21%.

To write a percent as a decimal, remember that a percent is always in the hundredths. 35 percent is the same as 35 hundredths.

35% = $\frac{35}{100}$ = 0.35

To write a decimal as a percent, think of the decimal in hundredths. Then you can write it as a percent. 7 tenths (0.7) is the same as 70 hundredths (0.70), which is the same as 70%

.7 = 0.70 = $\frac{70}{100}$ = 70%

A quick way to write a decimal as a percent is to multiply the decimal by 100. This method words because percents are already in hundredths.

.40 = 40 %

Write the following as a percent:

.30_____ .25_____ .77_____

.98_____ .43_____ .80_____

A quick way to write percent as a decimal is to divide by 100.

40%= .40 remember how to move the decimal to the left. Since it is already at the end of the whole number you move it to the left two places for the 2 zeros.

Write the following as a decimal

60%_____ 3%_____ 22%_____

32%_____ 7%_____ 88%_____

The last way is to change them to fractions.
We are going to memorize the common ones.

25% = $\frac{1}{4}$ 50%= $\frac{1}{2}$ 75%= $\frac{3}{4}$

10%=1/10 20%=2/10 30%=3/10 etc.

20%= 1/5 40%=2/5 60%=3/5 80%=4/5

How you would solve these is to take the percentage number or the decimal number and put it over 100. Then reduce down. 25/100= $\frac{1}{4}$= 25%

Let's fill in the blanks for the fractions:

20%=_____ 25%= _____ 30%=_____

75%=_____ 50%=_____ 60%=_____

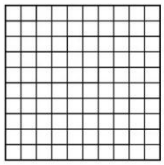
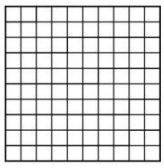
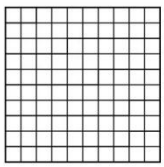
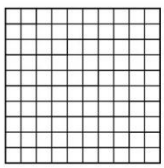
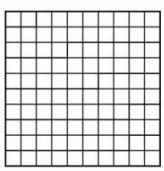
10%=_____70%+_____ 90%=_____

Finding a percent of a number

There are 432 people in our church. 45% of them are boys. How many people are boys.
To solve this we find a percent of a number. What is 45% of 432?
Let me share something with you. The word "is" means = and the word "of" means multiply(x)
When we solve these, we changed the percentage to a decimal. 45% becomes .45.
Then let's rewrite the formula. 432 x .45= Now we can solve it.

Solve:
What is 32% of 21? _____ What is 11% of 15?_____

What is 30 % of 15? _____ What is 33% of 32?_____

Draw	Fraction	Percent	decimal
			0.25
	$\frac{37}{100}$		
		18%	
	$\frac{7}{10}$		
		4%	

Average

To find the average of a set of numbers, you add up all the numbers and then divide by the number of addends. This is helpful in finding out averages of your tests. If I had 5 tests and I want to know what the average score was , I would add them all up and divide by 5.

Find the average of the following numbers:

5 3 6 8 3 2

_____

21 30 20 77

_____

32 41 5 7 2

_____

Now if you want to find out what the mean of your numbers is---the middle number you line up your numbers and get the middle number.

If you want to find out what the mode is---the number that shows up the most, you can see that by lining them up.

The range is the difference between the highest and lowest number is

8 2 4 1 2 5 7

First line them up: 1 2 2 4 5 7 8
The mode is= 2 most often found
The mean is 4 the middle number
The range is 7 the difference between 1 and 8
The average is 29 divided by 7 (you can do that)

Find me the following:

2 1 3 6 12 7 9

Mean_____ Median_____ Mode_____Average_____Range____

Review from yesterday and solve:

1 1 2 3 4 3 5

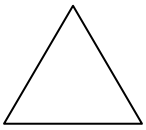
Mean_____ Median_____ Mode_____Average_____Range____

4 4 5 3 3 6 5 1

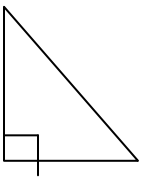
Mean_____ Median_____ Mode_____Average_____Range____

Kinds of triangles

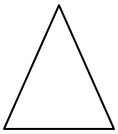
Triangles have three interior angles. An equilateral triangle has three sides of the same length.



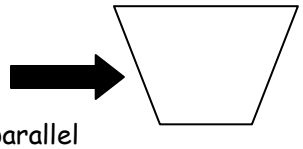
A right triangle has one right angle. A right angle is 90 degrees that square box means that it is a right angle



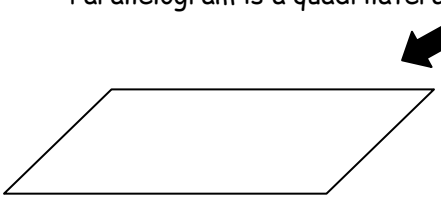
An isosceles triangle has at least two sides of the same length.



A polygon is a closed figure made out of three or more line segments. Triangles are three sided polygons. Four sided polygons are called quadrilaterals. (quad means 4)
A rectangle is a quadrilateral
A trapezoid is a quadrilateral it looks like a triangle with its head cut off



Parallelogram is a quadrilateral in which both pairs of opposite sides are parallel

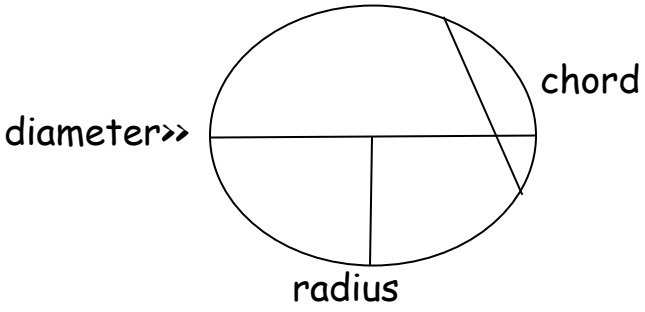


This is a rhombus another quadrilateral

Circles

You will be learning more about circles in the next years, this is just the basics.

If you were to draw a line through the center from one side to the other that would be called the diameter.
If you were to draw a line segment from one corner to another corner that would be called a chord.
A radius is half of the diameter. It is the distance from the center point to the edge of circle.
If the diameter is 6 inches. Then the radius would be 3 inches



Draw a trapezoid:

Draw a parallelogram

Draw a right triangle

draw a isosceles triangle

What is 33% of 100=_____

what is 21% of 60=_____

What is 24% of 20=_____

what is 30% of 100=_____

Plug in the answers. Remember of means to multiply and is means equal

What is $\frac{1}{2}$ of 8=

What is 2/3 of 4=

What is 1/7 of 24=

what is $\frac{3}{4}$ of 60=

What is 1/8 of 28=

what is $\frac{1}{4}$ of 50=

Write the following as a percent

.21_____ .89_____ 32.39_____ 31.98_____

Write the following as a decimal

75%_____ 23%_____ 125%_____ 1/5_____

$\frac{3}{4}$_____ 2/5_____ $\frac{1}{4}$_____ 1/10_____

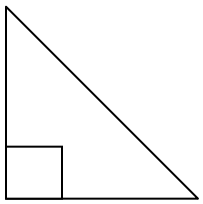
Write as a fraction

75%_____ 5%_____ 20%_____ 25%_____

Area of a triangle

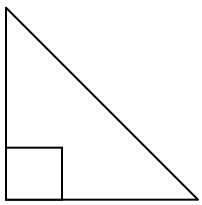
To find the area of a triangle, you need to multiple the base times the height and divide by 2

Area of triangle=(b x h) ÷ 2

7in 

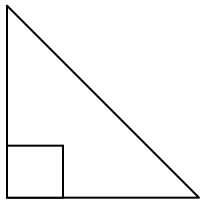
4 in

A=_____in^2

9ft 

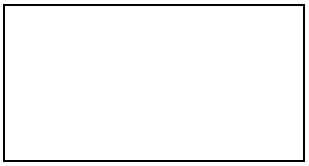
6ft

A=_____

10cm 

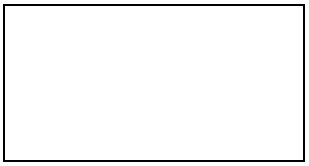
5 cm

A=_____

3in 

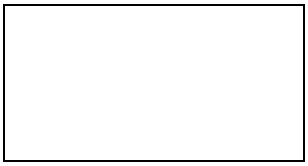
8 in

A=_____in^2

7ft 

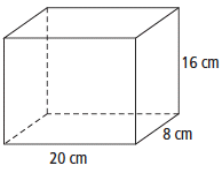
12 ft.

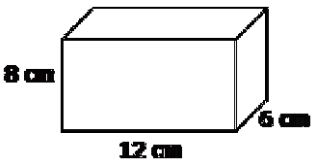
A=_____

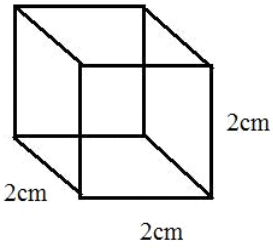
9cm. 

15 cm

A=_____



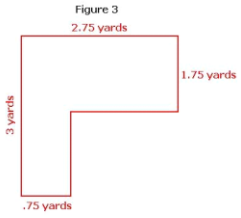




V=_____$cm3$

V=_____

V=_____



Perimeter =_____

Write an integer to represent each situation.

15 steps behind _____

10 days ahead of schedule _____

a gain of 35 yards _____

a $75.00withdrawal from bank _____

14 days after school started _____

20 minutes until arrival time _____

Write the opposite of each integer.

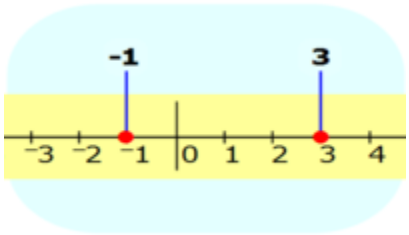
-54_____ -34_____ +32_____

-2_____ + 28_____ +2,560_____

Name each integer's absolute value—how much is it worth

$|+36|$ _____ $|-230|$_____ $|-2730|$_____$|+45|$_____

Remember integers ---imagine them on a number line.



Put these in order from greatest to least

+3, -4, -1, 0 _____

-7, +2, -6, +6_____

+10, +4, -9, +2_____

Addition and subtraction of integers

For addition if signs are the same add
If signs are different subtract the two and use sign of larger number

+ 2 + (+2)= +4 -5 + (+3)= -2

+ 8 + (-4)=_____ -9 + -7=_____

+8 + (-4)=_____ -6 + (+3)=_____

For subtraction of integers. Change the subtraction sign and then the number next to it. Then continue to add like yesterday rules.

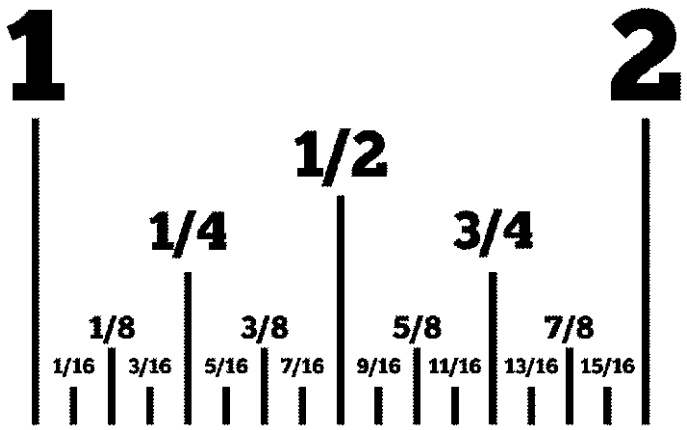
+7 - -2=_____ +7 + +2=+9

-8 - -6=_____ +6 - +5=_____

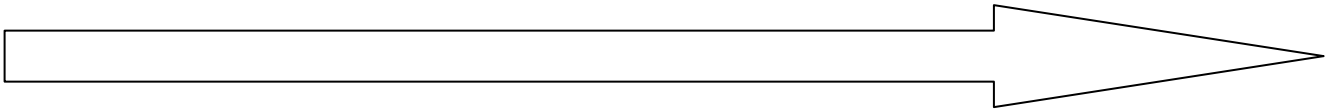
+17 - - 8=_____ -25 - +5=_____

+54 - -33=_____ -76 - -43=_____

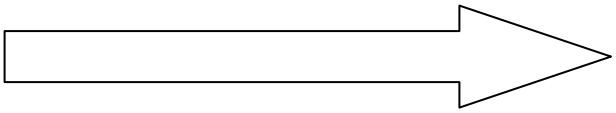
Measure in inches.



Here is the break down of an inch ruler. Measure the following to the exact sizes. Use the above chart to help you.



Measure in inches _____



Measure in inches _____

A garden that is 18 feet wide and 22 feet long needs to be fenced. Will 25 yards of fencing be enough?
Explain_____
_____

The trailer of a lumber truck is 15 feet wide, 18 feet long, and 10 feet hight. Is the truck large enough to carry 2,500 cubic feet of lumber?_____
_____

Tim has a box that is 18 inches long and 12 inches wide and has a volume of 3,240 cubic inches. He wants to pack an object that is 9 inches long, 6 inches wide, and 16 inches high. Will the object fit in the box?_____

New flooring is being installed in the school. The area is 15 feet wide by 33 feet long. How many square yards of flooring is needed? What is the perimeter of the foyer, measured in feet?_____

A swimming pool is 60 feet long and 30 feet wide. How many cubic feet of water will be needed to fill the pool to a depth of 8 feet?_____

Measure your pencil to exact _____

Measure your book_____

Ratio

A ratio is a way of comparing the size of two numbers. If a family has 4 girls and 5 boys then the ratio of girls to boys is 4:5 or 4 to 5 or 4/5.

There are 15 students in the preschool class. For every 7 kids there is one teacher. Which ratio shows the number of teachers to the number of students in the class?

a) 2:7
b) 7:15
c) 2:22
d) 1:7

A coin is flipped to decide who will go first in the game. What is the ratio that a head will be flipped?

a) 1:2
b) 2:1
c) 2:2
d) 2:3

Express this ratio 5:10

a) 10 is half of 5
b) 5 is half of 10

Five has what ratio of 15

a) One third
b) One half
c) Two thirds
d) Three fourths

How many cats are there if there are seven cats to twenty eight dogs?

a) One third
b) One fourth
c) One fifth
d) One sixth

The baseball team won 2 games. They played 17 games total. What ratio shows how many games they lost?

a) 2:17
b) 15:17
c) 17:2
d) 17:15

FINAL

Write out 2,654,782.06 in words _____

_____

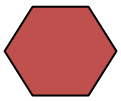
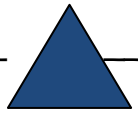
_____

Solve 65 + _____=83 13,692+78+312=a a=_____ 37x30=y y=___

765,311
-21,400

33 ⟌ 5,827

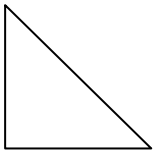
find the average of these numbers 7, 12, 29, 15, 18, 15_____

identify each polygon  _____  _____  _____

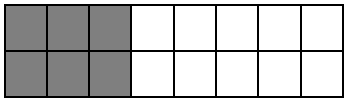
find the perimeter and area.

5 
9

Perimeter_____

7in 
7in

area_____

Write this fraction in lowest terms.  _____

Use < > to indicate which fraction is greater $\frac{7}{9}$ $\frac{4}{9}$ $\frac{5}{12}$ $\frac{5}{9}$

$\frac{3}{11} + \frac{5}{11}$=_____ $\frac{3}{4} + \frac{1}{8}$ = _____ $3\frac{1}{3} + 2\frac{1}{2}$=_____

$12\frac{5}{6} - 1\frac{5}{6}$=_____ $\frac{7}{8} \times \frac{1}{4}$=_____ $\frac{4}{5} \div \frac{2}{3}$=_____

Change $\frac{18}{5}$ to a mixed number _____write 3.4 as a mixed number in lowest terms____

37.3 + 265.25=_____

3.654- 1.7=_____

Write 35% as a fraction _____

4.8 x 1.3=_____

37.75 ÷100=_____

17.2 ÷8=_____