

**Multiplication**  
**X**

Per  
Of  
For Each

When a  
percent (%)  
number  
appears

Change to decimal  
& multiply with a  
number in the story

# Divide



Cut  
Split  
Put into

# Subtraction

Will find the difference  
in 2 numbers. Used to  
remove the part of a  
number we don't care  
about

# Reduce Fractions

Need number  
that will divide  
into both top &  
bottom

Change  
Improper  
Fraction to  
Mixed Number

**Divide bottom  
number into  
the top**

# Change Mixed Numbers into Improper Fractions

Multiply whole  
number with the  
bottom then add  
the top number

# Adding & Subtracting Fractions

Multiply the  
Denominators  
Change Top Numbers  
Add & Subtract the  
Top Number

# Multiply Fractions

1. Reduce crossways
2. Multiply Straight  
Across Top & Bottom

# Dividing Fractions

Keep the 1st  
Fraction  
Change the Sign  
Flip the Fraction

Change a  
% Number  
to Decimal

Move decimal  
two Spaces to  
the Left

Add a Positive  
&  
Negative  
Number

Subtract the small  
number from the  
Big Number. Use  
sign of big number

**Add Like  
Terms**

Add Numbers to  
the same team  
of same family  
(Like Terms)

Any time you see  
- - (minus and  
negative)  
Change it to

**+ + (both  
positive)**

When Multiplying  
a Letter With  
Itself  
You should

Add the  
Exponents

When Dividing  
a Letter With  
Itself You  
should

Subtract  
the  
Exponents

**Solve  
For X**

Move Letter to the Left  
Move Numbers to the  
Right

When you move  
something, change its  
sign

# Multiply & Divide Positive & Negative Numbers

Same signs =  
Positive Answer  
Different signs =  
Negative Answer

# FOIL and Factor

Add last numbers to  
get middle number  
Multiply last  
numbers to get last  
number

# Square Roots of Large Number

Multiply Last Digit  
Times Itself  
Until you get the  
Last Digit

# Area of a Triangle

**$(bxh)^{1/2}$**

# Volume of a Box

L

x

w

x

H

**Cubic  
Means**

**Volume**

**Square  
Means**

**Area**

# Area of a Rectangle

**L**

**x**

**w**

# Perimeter of a Rectangle

Add all  
the sides

Slope of  
Hypotenuse  
is...

Rise  
over Run

Convert square  
feet into square  
yards

**SF/9=SY**

2 Right  
Triangles  
are

**3,4,5 and  
6,8,10**

12

inches =

**1 foot**

36

inches =

**1 yard**

**4 quarts**

**=**

1

gallon

**1 ton =**

2,000

pounds

**3 feet =**

**1 yard**

**2 pints**

**=**

**1 quart**

16

ounces =

1

pound

**A gross  
is...**

144

items

Measurement  
conversion rule  
From Small to  
Large you...

**Divide**

Measurement  
conversion rule  
Large to Small  
you...

**Multiply**

20 degrees  
C =

68

F

25

degrees C

77

F

Change a  
Fraction to  
%

Divide bottom number  
into 100  
Take Answer  
&  
Multiply with Top  
Number

Find the  
percent  
decrease

Difference  
over Original  
(D/O)

**Find the  
percent  
increase**

**Difference  
over Original  
(D/O)**

What  
percent of

Part over Total  
(the part they  
ASK about)  
(P/T)

**What is the  
Probability**

Part over  
Total  
(P/T)

# Proportions

Find the Multiply  
number

Then Use it on the  
Item they ask you  
about

When a big  
number is  
divided in a  
Ratio

Divide the Big  
Number  
By the Total  
points

Money, Invest,  
Bank, Savings,  
Interest Rate

Multiply the  
Deposit  
Times The  
interest Rate

The sum of  
two number  
is...

Cut Big Number in Half  
Cut Small Number in  
Half  
Now ADD half  
SUBTRACT

When departing  
from same place at  
same time and go  
in OPPOSITE  
DIRECTIONS

Add their  
speeds  
together

What was  
the original  
price

Sale price ÷ the  
decimal  
number you  
paid

What do you  
need to score  
on last test?

1. Average wanted x Total  
Tests = TPN

2. Add up scores you already =  
PAH

3. Subtract the 2 numbers =  
What you need to score on last  
test