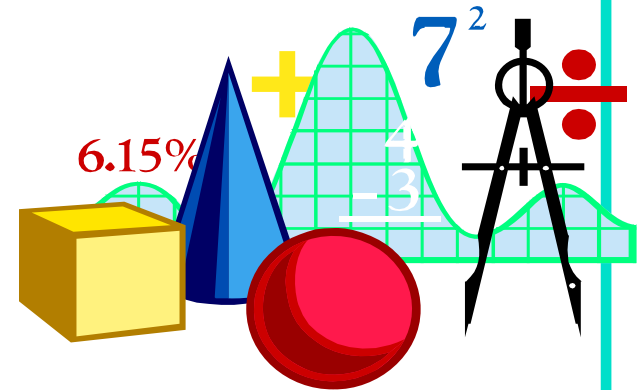
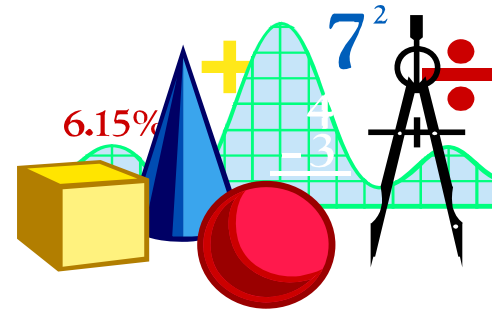


## Seven Steps to Solving Math

1. Analyze the problem.
2. Write down the formula.
3. Transpose your figures.
4. Solve any pre-problem.
5. Extend your arithmetic.
6. Solve any tail.
7. Check to make sure you have the right answer, in the form they are seeking.



## Land Measurement Quiz



1 foot = \_\_\_\_ inches

1 yard = \_\_\_\_ feet

1 mile = \_\_\_\_ feet

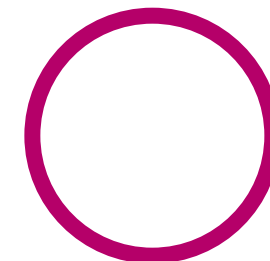
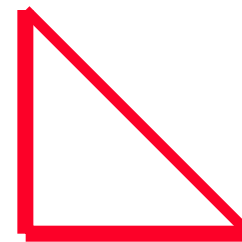
1 sq ft = \_\_\_\_ sq inches

1 sq yard = \_\_\_\_ sq feet

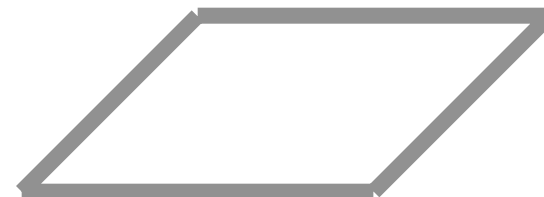
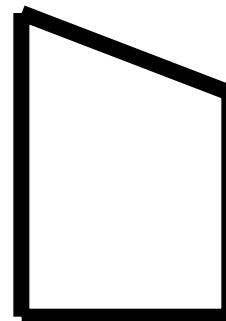
1 acre = \_\_\_\_ sq feet

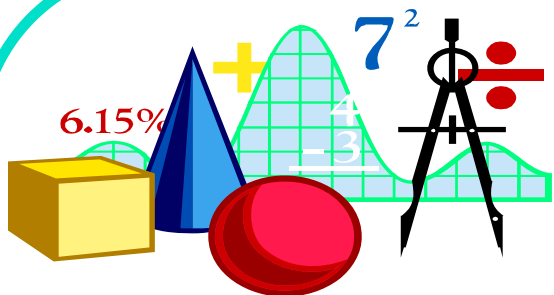
1 sq mile = \_\_\_\_ acres

1 section = \_\_\_\_ acres



Write the formula for  
determining the area of the  
shapes on the right ⇨ ⇨ ⇨



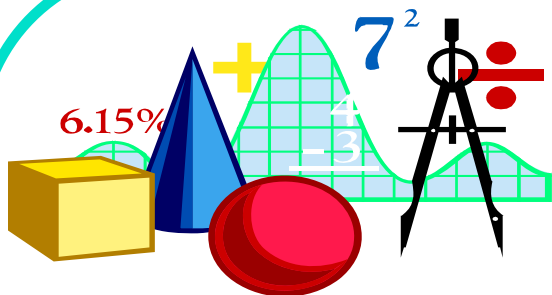


**Value x Rate = Income**

4 Value V

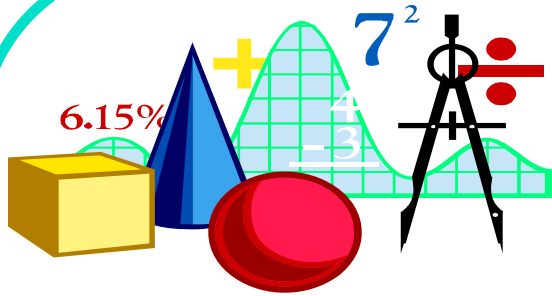
x 2      x Rate      x R

8 Income I



# Math Formula

	4	4	?
4	<u>x 2</u>	<u>x ?</u>	<u>x 2</u>
	?	8	8
<u>x 2</u>	321,000	285,000	?
	<u>x 7 %</u>	<u>x ? %</u>	<u>x 5 %</u>
8	?	22,800	21,000



$$V \times R = I$$

V

V

?

x R

x ?

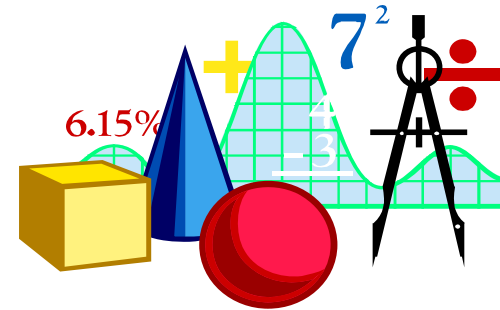
x R

?

I

I

# Profit and Loss



4

B

(Value Before Profit/Loss)

x 2

x %

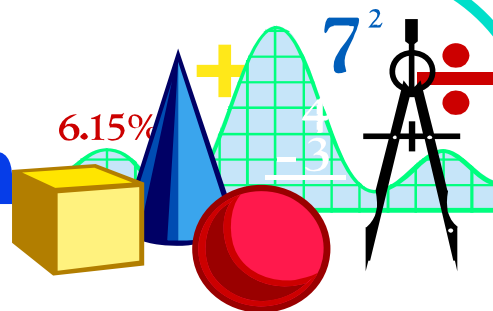
(100% + Profit or - Loss)

8

A

(Value After Profit/Loss)

# Appreciation/Depreciation



4

B

(Value Before  
Appreciation or  
Depreciation)

x 2

x %

(100% + Appreciation  
100% - Depreciation)

8

A

(Value After  
Appreciation or  
Depreciation)

# Simple Interest Problem

- You borrowed \$20,000 at 10% interest for 2½ years. When you paid the loan and interest back at the end of the loan period, how much did you pay the lender?

Value	\$20,000.	\$2,000.	\$20,000.
<u>x Rate</u>	<u>x 10%</u>	<u>x 2 ½</u>	<u>+ 5,000.</u>
Interest	\$2,000.	\$5,000.	<b>\$25,000.</b>



# Commission Problem

- A broker earned a \$1,980. commission for selling a timeshare unit at \$22,000. What was the sales commission rate?

Value	\$22,000.
<u>x Rate</u>	<u>      ?</u>
Income	\$1,980.

- \$1,980.00 divided by \$22,000. = . 09 = **9%**

## Commission Problem

- A salesperson works for a broker on a 60/40 commission basis (60% to broker & 40% to salesperson). The salesperson sells 50 acres of land at \$900. per acre. The gross sales commission is 10% of the sales price. How much does the broker receive?

\$900. per acre	\$45,000.	\$4,500.
<u>x 50 acres</u>	<u>x 10%</u>	<u>x 60%</u>
\$45,000.	\$4,500.	<b>\$2,700.</b>
Sales Price	Total Commission	Broker's Share

## Area Problem

- A developer is subdividing a 12-acre tract into lots measuring 80'x110'. Each lot has a perimeter of 380 feet and will sell for \$4,500. She has allowed 126,720 square feet for streets and sidewalks. How many lots will be realized.

43,560 sq ft per acre x 12 acres = 522,720 sq ft

522,720 sq ft – 126,720 for streets = 396,000

80 ft x 110 ft = 8,800 square feet per lot

396,000 square feet divided by 8,800 = 45 lots