

Cactus plants come 45 to a box, how many boxes will come if you order 360 plants?

Plants	45	
box	1	360

One case of soda has 15 bottles, if you get 99 cases, how many bottles will you have?

Violets cost \$1.75 for 3 plants, what will 15 violets cost?

A recipe needs $\frac{1}{2}$ cup of sugar for 8 servings, how much sugar for 20 servings?

Sugar	$\frac{1}{2}$ cup	8	
servings		1	20

★ Create your own!

Sam travels 57 miles and uses 4 gallons of gas, what is his gas mileage

miles	57	
gallon	4	1

35 flowers per vase, how many vases if there are 250 flowers?

Flowers	35	
vase	1	250

Movie tickets are 2 for \$5 this Saturday. How many tickets do they need to sell to earn \$350?

Tickets	2	4	
money	5	10	350

15 cases

Cases	1	10	5	
Bottles	15			15

$\frac{1}{2}$ 10 + 5

Problem Solving PRE-ALGEBRA

Use a proportion to solve each problem.

1. A 2-kilogram roast requires 90 minutes to cook. At that rate, how long should a 3-kilogram roast be cooked?

It should be cooked _____ minutes.

1.	2	1	3
Kg			
min	90	45	

2. A jogger burned 96 calories during 8 minutes of jogging. At that rate, how many calories would be burned during 14 minutes of jogging?

_____ calories would be burned.

2.

3. On a certain map 2 inches represent 250 miles. What distance would 3 inches represent on this map?

Three inches would represent _____ miles.

3.

19	2	1	3
miles	250	125	

4. Six tons of ore can be processed in 3 hours. At that rate, how many tons of ore can be processed in 8 hours?

_____ tons of ore can be processed.

4.

5. An automobile used 8 gallons of gasoline in traveling 120 miles. At that rate, how many gallons will be used in traveling 360 miles?

_____ gallons of gasoline will be used.

5.

miles	120		360
gallon	8	1	

6. Nine items can be produced in 15 minutes. How many items can be produced in 35 minutes?

_____ items can be produced in 35 minutes.

6.

items	9		
min	15	5	35

→ 3

7. A baseball player has hit 9 home runs in 54 games. At that rate, how many home runs will he hit during a 162-game season?

He will hit _____ home runs.

7.

8. A 9-inch piece of rubber can be stretched to a length of 15 inches. At that rate, to what length can a 12-inch piece of rubber be stretched?

It can be stretched to a length of _____ inches.

8.

$$\frac{9}{15} = \frac{12}{x}$$

$$9x = 12 \times 15$$