

1.)

Solve the Equation:

$$20 = p + 4$$

2.)

Write an equation to describe following statement:

*The difference of a number and 5 is 22*

3.)

Students at a school went on a trip. The given equation models the total cost of the trip, where  $x$  is the number of students who went on the trip.

$$18x = 900$$

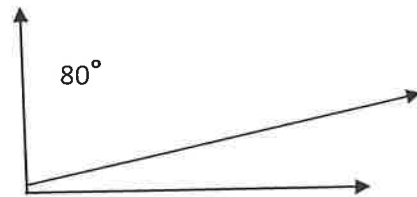
How many students went on the trip?

4.)

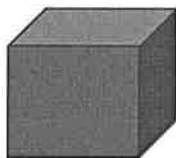
Kari wants to find the measure of the missing angle. She knows the sum of the 2 angles is 90 degrees.

Write an equation to represent this situation.

Using your equation solve for the missing angle,  $x$



5.)



6 cm

Find the volume of the cube.

$$\text{Volume} = s^3$$

6.)

Solve the Equation:

$$20 = m - 66$$

7.)

Solve the Equation:

$$12f = 144$$

8.)

Solve the Equation:

$$11 + m = 60$$

9.)

A bus is traveling to Miami. The bus is moving at 70 miles per hour,. Write an equation to show the relationship between the distances traveled, ***d***, and the time, ***t***.

***Identify the independent and dependent variables.***

10.)

Bobby runs 300 meters in one minute.

Write an equation to relating distance, ***d***, traveled to the time, ***t***, in minutes.

How far would he run after 5 minutes?

11.)

Holly has three times as many sweatshirts as her sister, Molly. Write an equation to show the relationship of sweatshirts Holly has, ***h***, and the number of sweatshirts Molly has, ***m***.

Use your equation to find the number of sweatshirts Holly has when Molly has 12 sweatshirts.

12.)

Sam has \$54.50 saved up. He plans to save an additional \$12.25 per month.

Write and equation to show the relationship of ***m***, number of month, to ***t***, total saved.

13.)

Solve the Equation:

$$2y = 40$$

14.)

Solve the Equation:

$$\frac{x}{5} = 65$$

15.)

Heather is dog sitting and she charges \$12 per hour. Write an equation to show the relationship of hours,  $h$ , worked to total earnings,  $e$ .

***Identify the independent and dependent variables.***

16.)

When graphing, on what axis does the independent variable go?

When graphing on what axis does the dependent variable go?

17.)

A train travels at constant rate of 80 miles per hour.

Write an equation to relating distance,  $d$ , traveled to the time,  $t$ , in hours.

18.)

A bowling alley charges a flat fee of \$3 for shoes and \$5 per game. Write an equation relating total cost,  $c$ , to the number of games played,  $g$ .

***Identify the independent and dependent variables.***

19.)



12.5 cm

Find the volume of the cube.

**$Volume = s^3$**

20.)

Solve the Equation:

$$\frac{x}{3} = 14$$

21.)

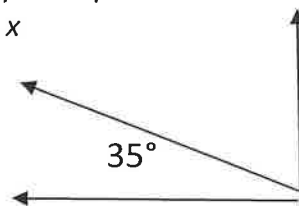
Sara bought 8 apples and  $b$  bananas. She had 15 total pieces of fruit. Write an equation to show the SUM of apples and bananas Sara brought.

Then, solve for  $b$ .

22.)

Landan wants to find the measure of the missing angle. He knows the sum of the 2 angles is 90 degrees.

Write an equation to represent this situation. Using your equation solve for the missing angle,  $x$



23.)

Bradyn has three times as many Pokeman cards than Fred. Write an equation to represent this situation using  $f$  to represent the number of cards Fred has and  $b$  to represent the number of cards Bradyn has.

24.)

Matt pays \$25 a month for his gym membership, plus an additional \$6.50 for each fitness class he participates in. Write an equation to describe the relationship in the total monthly charge,  $m$ , and  $c$ , classes he takes.

If Matt participates in 5 classes this month, how much will he pay?

1.)

Solve the Equation:

$$\begin{array}{r} 20 = p + 4 \\ -4 \quad -4 \\ \hline 16 = p \end{array}$$

2.)

Write an equation to describe following statement:

The difference of a number and 5 is 22

$$n - 5 = 22$$

3.)

Students at a school went on a trip. The given equation models the total cost of the trip, where  $x$  is the number of students who went on the trip.

$$18x = 900$$

How many students went on the trip?

$$\frac{18x = 900}{18} \quad x = 50 \text{ students}$$

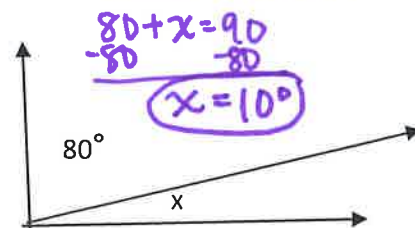
4.)

Kari wants to find the measure of the missing angle. She knows the sum of the 2 angles is 90 degrees.

Write an equation to represent this situation.

$$80 + x = 90$$

Using your equation solve for the missing angle,  $x$



5.)



6 cm

Find the volume of the cube.

$$\text{Volume} = s^3$$

$$6^3 = 6 \cdot 6 \cdot 6 = 216 \text{ cm}^3$$

6.)

Solve the Equation:

$$\begin{array}{r} 20 = m - 66 \\ +66 \quad +66 \\ \hline 86 = m \end{array}$$

7.)

Solve the Equation:

$$\frac{12f}{12} = \frac{144}{12}$$

$$f = 12$$

8.)

Solve the Equation:

$$\begin{array}{r} 11 + m = 60 \\ -11 \quad | \quad -11 \\ \hline m = 49 \end{array}$$

9.)

A bus is traveling to Miami. The bus is moving at 70 miles per hour,  $70t$ . Write an equation to show the relationship between the distances traveled,  $d$ , and the time,  $t$ .

$$d = 70t$$

\* distance = speed  $\times$  time  
Identify the independent and dependent variables.  
 $I =$  time (hours)  
 $D =$  distance

10.)

Bobby runs 300 meters in one minute.

Write an equation to relating distance,  $d$ , traveled to the time,  $t$ , in minutes.

$$d = 300t$$

How far would he run after 5 minutes?

$$d = 300 \cdot 5$$

$$d = 1500 \text{ meters}$$

11.)

Holly has three times as many sweatshirts as her sister, Molly. Write an equation to show the relationship of sweatshirts Holly has,  $h$ , and the number of sweatshirts Molly has,  $m$ .

$$h = 3m$$

Use your equation to find the number of sweatshirts Holly has when Molly has 12 sweatshirts.

$$h = 3 \cdot 12$$

$$h = 36 \text{ sweatshirts}$$

12.)

Sam has \$54.50 saved up. He plans to save an additional \$12.25 per month.

$$12.25m$$

Write an equation to show the relationship of  $m$ , number of month, to  $t$ , total saved.

$$t = 54.50 + 12.25m$$

13.)

Solve the Equation:

$$\frac{2y}{2} = \frac{40}{2}$$

$$y = 20$$

14.)

Solve the Equation:

$$5 \cdot \frac{x}{5} = 65 \cdot 5$$

$$x = 325$$

15.)

Heather is dog sitting and she charges \$12 per hour. Write an equation to show the relationship of hours,  $h$ , worked to total earnings,  $e$ .

$$12h = e$$

Identify the independent and dependent variables.

$I =$  hours  
 $D =$  total earnings

16.)

When graphing, on what axis does the independent variable go?

$x$ -axis

( $I-x$ )

When graphing on what axis does the dependent variable go?

$y$ -axis

17.)

A train travels at constant rate of 80 miles per hour.

Write an equation to relating distance,  $d$ , traveled to the time,  $t$ , in hours.

$$\text{distance} = \text{speed} \times \text{time}$$

$$d = 80t$$

18.)

A bowling alley charges a flat fee of \$3 for shoes and \$5 per game. Write an equation relating total cost,  $c$ , to the number of games played,  $g$ .

$$3 + 5g = c$$

Identify the independent and dependent variables.

$I =$  # of games  
 $D =$  total cost

19.)



12.5 cm

Find the volume of the cube.

 $\text{Volume} = s^3$ 

$$12.5^3 = 12.5 \cdot 12.5 \cdot 12.5 = 1953.125 \text{ cm}^3$$

20.)

Solve the Equation:

$$3 \cdot \frac{x}{3} = 14 \cdot 3$$

$$x = 42$$

21.)

Sara bought 8 apples and  $b$  bananas. She had 15 total pieces of fruit. Write an equation to show the SUM of apples and bananas Sara brought.

$$8 + b = 15$$

Then, solve for  $b$ .

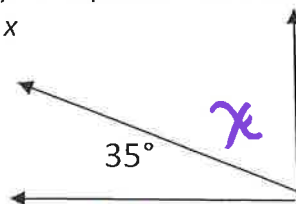
$$\begin{array}{r} 8 + b = 15 \\ -8 \quad -8 \\ \hline b = 7 \end{array} \quad \text{7 bananas}$$

22.)

Landan wants to find the measure of the missing angle. He knows the sum of the 2 angles is 90 degrees.

$$35 + x = 90$$

Write an equation to represent this situation. Using your equation solve for the missing angle,  $x$



$$\begin{array}{r} 35 + x = 90 \\ -35 \quad -35 \\ \hline x = 55 \end{array}$$

$$x = 55^\circ$$

23.)

Bradyn has three times as many Pokeman cards than Fred. Write an equation to represent this situation using  $f$  to represent the number of cards Fred has and  $b$  to represent the number of cards Bradyn has.

$$b = 3f$$

24.)

Matt pays \$25 a month for his gym membership, plus an additional \$6.50 for each fitness class he participates in. Write an equation to describe the relationship in the total monthly charge,  $m$ , and  $c$ , classes he takes.

$$m = 25 + 6.50c$$

If Matt participates in 5 classes this month, how much will he pay?

$$m = 25 + 6.50 \cdot 5$$

$$m = 25 + 32.50$$

$$= \$57.50$$