1

Answer: $(2, 0)$

What percent of 80 is 36? ___ %

M

2

Answer: 45

Find the slope of the line passing through the points $(-2, 7)$ and $(-8, 3)$.

A

3

Answer: $\frac{2}{3}$

Find the slope of the line.

$$5x-4y=-16$$

T

4

Answer: $\frac{5}{4}$

Evaluate

$$1-(-2)^3-\left(-\frac{6}{3}\right)^2$$

H

5

Answer: 5

Solve for x.

$$5=\frac{x+56}{9}$$

Simplify your answer as much as possible.

E

6

Answer: -11

Customers of a phone company can choose between two service plans for long distance calls. The first plan has a $\$24$ monthly fee and charges an additional $\$0.12$ for each minute of calls. The second plan has a $\$28$ monthly fee and charges an additional $\$0.08$ for each minute of calls. For how many minutes of calls will the costs of the two plans be equal?

___ minutes

S

7

Answer: 100

Multiply. Write your answer as a fraction in simplest form.

$$\frac{8}{9} \times \frac{5}{6}$$

S

8

Answer: $\frac{20}{27}$

In a recent year, 18.4% of all registered doctors were female. If there were $45{,}200$ female registered doctors that year, what was the total number of registered doctors?

Round your answer to the nearest whole number.

____ doctors

E

9

Answer: 245652

Solve for w.

$$-5(w+7)=7w-11$$

Simplify your answer as much as possible.

N

10

Answer: -2

A fruit company delivers its fruit in two types of boxes: large and small. A delivery of 3 large boxes and 2 small boxes has a total weight of 60 kilograms. A delivery of 5 large boxes and 6 small boxes has a total weight of 118 kilograms. How much does each type of box weigh?

The large box is ____ kg and the small is ____ kg.

T

11

Answer: $(15.5, 6.75)$

Solve for y.

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

Simplify your answer as much as possible.

I

12

Answer: -5

The container that holds the water for the football team is $\frac{1}{5}$ full. After pouring in 13 gallons of water, it is $\frac{7}{10}$ full. How many gallons can the container hold?

A

13

Answer: 26

186% of 30.5 is what number?

L

14

Answer: 56.73

Solve the inequality for y.

$$-\frac{1}{9}y - 17 \leq -13$$

$y \geq ??$

S

15

Answer: -36

At a hockey game, a vender sold a combined total of 117 sodas and hot dogs. The number of sodas sold was two times the number of hot dogs sold. Find the number of sodas and the number of hot dogs sold.

___ sodas, ___ hot dogs

I

16

Answer: $(78, 39)$

An item is regularly priced at $\$48$. It is on sale for 60% off the regular price.

Use a calculator to find the sale price.

$_____

S

17

Answer: 19.20

Evaluate.

$$\frac{2}{9} - \left(\frac{1}{3}\right)^3$$

Write your answer in simplest form.

T

18

Answer: $\frac{5}{27}$

A metal rod will be cut into pieces that are each $\frac{1}{15}$ meters long. The rod is $\frac{3}{5}$ meters long. How many pieces will be made from the rod?

Write your answer in simplest form.

H

19

Answer: 9

Use substitution to solve the system.

$$-3x+y=-9$$
$$-4x+3y=-7$$

E

20

Answer: $(4, 3)$

To rent a certain meeting room, a college charges a reservation fee of $\$45$ and an additional fee of $\$8.30$ per hour. The history club wants to spend at most $\$94.80$ on renting the meeting room.

What are the possible amounts of time for which they could rent the meeting room?
Use t for the number of hours the meeting room is rented, and solve your inequality for t.

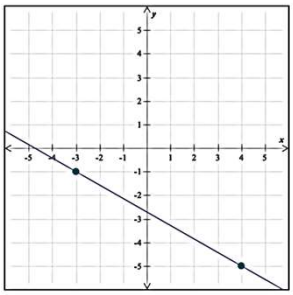
No more than _____ hours.

B

21

Answer: 6

Find the slope of the line graphed below.



E

22

Answer: $-\frac{4}{7}$

Evaluate the expression when $x=-4$ and $y=4$

$-6x+y$

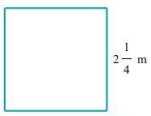
S

23

Answer: 28

Find the area of the following square.

Write your answer in simplest form.
Be sure to include the correct unit in your answer.



____ m^2

T

24

Answer: $\frac{81}{16}$

Solve the following system of equations.

$$5x-6y=10$$
$$-8x-3y=-16$$

!

25