1)

$$12x - 5x = 24 + 3x$$

2)

$$\frac{r - 2}{3} = 11$$

3)

$$\frac{x}{7} = -10$$

4)

$$3 - 2x = 7$$

5)

Write and solve an equation to represent the situation.

One health club charges a $50 sign up fee and $65 per month. Another club charges a $90 sign up fee and $45 per month. For what number of months is the cost of the clubs equal?

6)

$$-2(x + 5) = 18$$

7)

$$\frac{x}{3} + \frac{2x}{6} = 10$$

8)

$$-2 = \tfrac{1}{4}x + 10$$

9)

$$4(x - 1/2) = x + 10 + 3x$$

10)

Write and solve an equation to represent the situation.

Pristine Printing will print business cards for $0.10 each plus a set up charge of $15. The Printing Place offers business cards for $0.15 each with a set up charge of $10.
What number of business cards cost the same from either printer?

11)

$$h + 5 - 8h = 3h - 6$$

12)

$$\frac{3}{4}(x - 1) = \frac{1}{4}$$

13)

$8(x + 2) - x = 4 + 2(x + 1)$

14)

$x - 10 = -15$

15)

$-9x = 63$

16)

$2x - 6 = 11$

17)

$7 = x - 2$

18)

$36 + 6x = 10x$

19)

Solve for x.

$-3y + xy = 2x + 5$

20)

Solve for x.

$10xy + 5xz - 2yz = 20$

21)

Solve for x.

$$\frac{x}{w} - 2 = \frac{y}{z}$$

22)

Solve for y:

$ax + by = c$

23)

Solve for y:

$xy + 2y = w$

24)

Solve for y:

$3y + x = -y + 4$

25)

A building is 1450 ft tall.
How many meters tall is the
building?
Use 1m = 3.28 ft

26)

An athlete ran a sprint
of 100 ft in 3.1 seconds.
At what speed was the
athlete running in miles
per hour?

27)

$$\frac{b-8}{5} = \frac{b+3}{4}$$

28)

$$\frac{n}{5} = \frac{2n+4}{6}$$

29)

You deposited $125 in a savings account that
earns a simple interest rate of 1.75% per year.
You earned a total of $8.75 in interest.
For how long was your money in the account?

30)

125% of what number is 17.5?

31)

What percent of 56 is 42?

32)

In one year, the toll for passenger cars to use a tunnel rose from $3 to $3.50. What is the percent increase?

33)

You think that the distance between your house and a friend's house is 5.5 miles. The actual distance is 4.75 miles. What is the percent error in your estimation?