

Unit 2: Equations – Review

Solve for the unknown.

$$8 + m = -2$$

$$3x = 18$$

$$-3s - 6 = 9$$

$$k - 7 = -11$$

$$\frac{h}{5} = -4$$

$$-7y - 6 = -20$$

Solve for the unknown.

$$3 + 2m + 6m = 19$$

$$3x + 7 = 2x - 3$$

$$7 + 3k - 2 = 4k$$

$$4 - (3p - 2) = p - 10$$

$$3(2k - 5) - k = 4 - (3k + 7)$$

$$2(n - 8) = -4(2n - 1)$$

Solve for the unknown.

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

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

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

$$-3 = \frac{5x + 4}{7}$$

Solve for the unknown.

$$\frac{y - 8}{3} = \frac{y + 4}{2}$$

$$\frac{2}{5}(x + 3) = \frac{1}{2}(x - 5)$$

Rearrange each formula to isolate the variable indicated.

$$P = a + b + c \quad \text{for } a$$

$$g = 3h \quad \text{for } h$$

$$a = \frac{v}{t} \quad \text{for } t$$

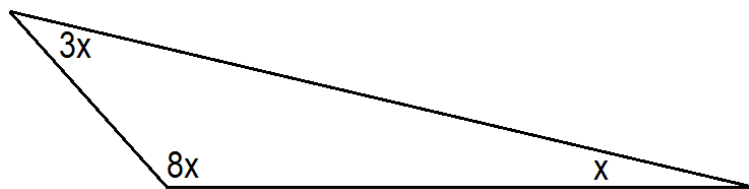
$$d = mt + b \quad \text{for } t$$

$$d = mt + b \quad \text{for } b$$

$$X = 5YZ^2 \quad \text{for } Z$$

A triangle has angle measures that are related as follows:

- The largest angle is eight times the smallest angle
- The middle angle is triple the smallest angle



Find the measure of each angle.

Hint: The sum of the angles in a triangle is 180 degrees.

Think of an algebraic expression to represent each description:

a) Triple a number

b) Four more than a number

c) Heather is 5 years older than Megan

d) Sarah makes five less than double Emma's salary.

The sum of three consecutive integers is 54.
What are the integers?

Jamie earns \$150 more per week than Johnny and \$100 less than Jackson. Together the three earn \$2050 per week. How much does each person earn per week?

Shawn works at a cell phone kiosk. He earns \$8.50 per hour plus a \$15 commission for each contract he sells.

- a) Write an expression to represent Shawn's earnings.
- b) How much will Shawn make in an 8-hr shift if he sells seven contracts?
- c) How many contracts does Shawn need to sell to earn \$790 in a 40-hr work week?