

Translating Variable Equations

Part I Write a statement for each of the following algebraic expressions:

1.)
$$x + 5 = 9$$

5.)
$$xy = 16$$

2.)
$$2y - 3 = 7$$

6.)
$$5p - q = 10$$

3.)
$$3z = 12$$

7.)
$$x^2 + 1 = 22$$

4.)
$$\frac{m}{4} + 7 = 6$$

8.)
$$\frac{-7x}{3} = 100$$

Part II Write an algebraic expression for each of the following statements:

12.) the sum of 9 and
$$x$$
 is two-thirds

15.)

ANSWER KEY

- 1.) The sum of x and 5 equals 9
- 5.) The product of x and y equals 16

2.) Twice y minus 3 is 7

- 6.) Five times p decreased by q is 10
- 3.) The product of 3 and z equals 12
- 7.) The sum of x squared and 1 equals 22
- 4.) One quarter of m plus 7 equals 6
- 8.) The quotient of -7x and 3 is 100

9.)
$$y^3 = 27$$

13.)
$$4g = h + 8$$

10.)
$$11x = 55$$

14.)
$$\frac{j}{5+k} = 9$$

11.)
$$\frac{x^2}{2} = 72$$

15.)
$$\frac{x}{3} + \frac{y}{2} = 1$$

12.)
$$9+x=\frac{2}{3}$$

16.)
$$5p - \frac{r}{7} = 36$$