## **Evaluating Expressions and Solving Equations** Algebra 2

Evaluate the following expressions given the indicated value for the variable.

1) 
$$-17 + 3(x + 9)^2 \div 3$$
,  $x = 4$ 

2) 
$$6 \cdot 4^2 \div 12 - p$$
,  $p = 12$ 

Solve the following equations, check your answers, and graph the solutions.

3) 
$$x + 5 = 8$$

4) 
$$10 = z - 3$$

5) 
$$b + 7 = -4$$

6) 
$$-6 = t - 5$$

7) 
$$3v = 12$$

8) 
$$\frac{w}{5} = 6$$

9) 
$$-28 = 7y$$

10) 
$$-42 = \frac{g}{6}$$

11) 
$$-c = -11$$

12) 
$$-8 = \frac{w}{-5}$$

13) 
$$x^2 = 25$$
 14)  $x^3 = 8$ 

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15) 
$$j^2 = -16$$

16) 
$$v^3 = -64$$