## **Solutions for Equations and Inequalities**

Which of the values is a solution to the equation?

$$1.5 + p = 3.5$$

$$p = 1, 2, 3, 4$$

You can draw a model to show that 1.5 + p equals 3.5.

3.5	
1.5	p

Try each value of p.

$$1.5 + 1 = 2.5$$
 Not a solution

$$1.5 + 2 = 3.5$$
 Solution

$$1.5 + 3 = 4.5$$
 Not a solution

$$1.5 + 4 = 5.5$$
 Not a solution

Which numbers, when substituted for p, are solutions to

$$5.6 + p \ge 8.7$$
  $p = 3, 4, 5$ 

$$5.6 + 3 \ge 8.7$$
 Not a solution

$$5.6 + 4 \ge 8.7$$
 Solution

$$5.6 + 5 \ge 8.7$$
 Solution

Tell which values of the variable are solutions to the equation or inequality. You can draw a model to help you.

**1.** 
$$c + 4 = 8$$
  $c = 1, 2, 3, 4$ 

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**2.** 
$$9 - a > 6$$

**2.** 
$$9 - g > 6$$
  $g = 3, 4, 5, 6$ 

**3.** 
$$15 \ge r - 7.1$$
  $r = 10, 15, 20$ 

$$r = 10, 15, 20$$

**4.** 
$$k-7 < 3.5$$

**4.** 
$$k - 7 < 3.5$$
  $k = 12.1, 10, 9, 7.2$ 

**5.** Sahil bought a book of 25 ride tickets at the carnival. So far he has used 20 of them. The table shows numbers of tickets for some carnival rides. If t equals the number of tickets per ride, which numbers, when substituted for t are solutions for  $20 + t \le 25$ ?

Carnival Rides		
Ride	Number of Tickets	
Whiplash	6	
Sunset Cruise	2	
Up 'N Down	3	
Fireball	5	