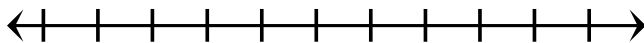


**Solving One-Variable Equations and Inequalities***Independent Practice***Use the situation below to answer questions 1 – 3.**

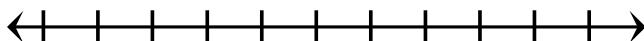
Two angles are complementary. The measure of one angle is  $21^\circ$ .

1. Write an equation that could be used to solve for  $x$ , the measure of the second angle.
2. Solve the equation for  $x$ .
3. Identify the location of the solution on the number line below.

**Use the situation below to answer questions 4 – 6.**

The perimeter of a rectangle is no more than 60 inches. The length of the rectangle is 12 inches.

4. Write an inequality that could be used to solve for  $x$ , the width of the rectangle.
5. Solve the inequality for  $x$ .
6. Represent the solution on the number line below.



**In questions 7 – 10, solve the equation.**

7.  $5x = 65.5$

9.  $x - 4.5 = 26.3$

8.  $\frac{18}{x} = 3$

10.  $6x = -84$

**In questions 11 – 13, solve the inequality.**

11.  $4x < 91$

13.  $-8x > 328$

12.  $x - 6 \geq 103.8$

**In questions 14 – 15, determine whether the given numbers are solutions of the equation or inequality. Explain how you know.**

14. Is 4 a solution to the equation  $6.1x = 19$ ?



15. Are 8, 15.1, and 21 solutions to the inequality  $x - 8.1 \leq 11$ ?

**For questions 16 – 17 write a real-world problem that you could use the given equation to solve.**

16.  $5x = 50$

17.  $5x < 75$

