

11. Using an interval or intervals, describe all the x -values within or including a distance of the given values.

No more than 9 units from the number 2.

- A. $(-7, 11)$
 - B. $[-7, 11]$
 - C. $(7, 11)$
 - D. $[7, 11]$
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12. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-8x - 6 \leq 5x + 5$$

$$a = \boxed{}$$

- A. $(-\infty, a]$, where $a \in [-1.59, -0.03]$
 - B. $[a, \infty)$, where $a \in [-3, 0.4]$
 - C. $(-\infty, a]$, where $a \in [0.6, 1.1]$
 - D. $[a, \infty)$, where $a \in [-0.04, 0.99]$
 - E. $(-\infty, \infty)$
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13. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-\frac{3x}{2} - \frac{8}{3} > -\frac{4x}{7} - \frac{7}{6}$$

$$a = \boxed{}$$

- A. (a, ∞) , where $a \in [-1, 6]$
 - B. (a, ∞) , where $a \in [-5, 1]$
 - C. $(-\infty, a)$, where $a \in [-5, 0]$
 - D. $(-\infty, a)$, where $a \in [0, 3]$
 - E. There is no solution to the inequality.
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14. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-4 + 3x > 5x \quad \text{or} \quad 6 + 3x < 5x$$

$$a = \boxed{} \quad b = \boxed{}$$

- A. $(-\infty, a] \cup [b, \infty)$, where $a \in [-5.9, -2.2]$ and $b \in [1.2, 2.3]$
B. $(-\infty, a) \cup (b, \infty)$, where $a \in [-2.6, -0.3]$ and $b \in [2.36, 3.45]$
C. $(-\infty, a) \cup (b, \infty)$, where $a \in [-3.9, -2.4]$ and $b \in [1.66, 2.21]$
D. $(-\infty, a] \cup [b, \infty)$, where $a \in [-2.5, -0.2]$ and $b \in [2.9, 3.4]$
E. $(-\infty, \infty)$
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15. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-4 + 4x < \frac{31x - 9}{7} \leq 4 + 4x$$

$$a = \boxed{} \quad b = \boxed{}$$

- A. $[a, b)$, where $a \in [-7, -4]$ and $b \in [7, 14]$
B. $(a, b]$, where $a \in [-17, -11]$ and $b \in [4, 8]$
C. $[a, b)$, where $a \in [-14, -12]$ and $b \in [5, 8]$
D. $(a, b]$, where $a \in [-12, -6]$ and $b \in [9, 17]$
E. There is no solution to the inequality.
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