

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

No more than 3 units from the number 1.

- A. $[2, 4]$
 - B. $[-2, 4]$
 - C. $(-2, 4)$
 - D. $(2, 4)$
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12. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-8x + 6 \leq -6x + 3$$

$$a = \boxed{}$$

- A. $[a, \infty)$, where $a \in [-1, 8]$
 - B. $(-\infty, a]$, where $a \in [-1.4, 2.3]$
 - C. $(-\infty, a]$, where $a \in [-4, 1]$
 - D. $[a, \infty)$, where $a \in [-4.7, -0.2]$
 - 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.

$$\frac{6x}{5} + \frac{3}{8} > \frac{5x}{3} - \frac{10}{7}$$

$$a = \boxed{}$$

- A. $(-\infty, a)$, where $a \in [3, 5]$
 - B. (a, ∞) , where $a \in [-5, -2]$
 - C. $(-\infty, a)$, where $a \in [-4, -1]$
 - D. (a, ∞) , where $a \in [1, 6]$
 - 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.

$$-4 + 6x > 8x \quad \text{or} \quad 7 + 9x < 10x$$

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

- A. $(-\infty, a) \cup (b, \infty)$, where $a \in [-9, -5]$ and $b \in [-4, 5]$
B. $(-\infty, a] \cup [b, \infty)$, where $a \in [-6, 0]$ and $b \in [4, 9]$
C. $(-\infty, a) \cup (b, \infty)$, where $a \in [-5, 4]$ and $b \in [5, 9]$
D. $(-\infty, a] \cup [b, \infty)$, where $a \in [-11, -5]$ and $b \in [1, 6]$
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.

$$-6 - 5x < \frac{-18x + 7}{4} \leq -5 - 6x$$

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

- A. $[a, b)$, where $a \in [-16, -15]$ and $b \in [-8, -4]$
B. $(a, b]$, where $a \in [2, 8]$ and $b \in [8, 19]$
C. $(a, b]$, where $a \in [-17, -13]$ and $b \in [-7, -3]$
D. $[a, b)$, where $a \in [2, 5]$ and $b \in [15, 18]$
E. There is no solution to the inequality.
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