

11. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-5x - 7 \leq 9x - 5$$

- A. $(-\infty, a]$, where $a \in [-0.37, -0.1]$
 - B. $[a, \infty)$, where $a \in [-0.04, 0.34]$
 - C. $[a, \infty)$, where $a \in [-0.95, -0.05]$
 - D. $(-\infty, a]$, where $a \in [0.07, 0.25]$
 - E. None of the above.
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12. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$\frac{9}{9} - \frac{4}{3}x \leq \frac{-3}{5}x - \frac{8}{8}$$

- A. $[a, \infty)$, where $a \in [-9, -2]$
 - B. $(-\infty, a]$, where $a \in [1, 6]$
 - C. $(-\infty, a]$, where $a \in [-5, -2]$
 - D. $[a, \infty)$, where $a \in [0, 4]$
 - E. None of the above.
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13. Using an interval or intervals, describe all the x -values within or including a distance of the given values.

No more than 6 units from the number 8.

- A. $(-2, 14)$
 - B. $[-2, 14]$
 - C. $(-\infty, -2) \cup (14, \infty)$
 - D. $(-\infty, -2] \cup [14, \infty)$
 - E. None of the above
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14. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$3 + 7x > 10x \quad \text{or} \quad 6 + 4x < 5x$$

- A. $(-\infty, a] \cup [b, \infty)$, where $a \in [-9, -4]$ and $b \in [-3, 4]$
 - B. $(-\infty, a) \cup (b, \infty)$, where $a \in [0, 5]$ and $b \in [2, 10]$
 - C. $(-\infty, a] \cup [b, \infty)$, where $a \in [-1, 3]$ and $b \in [5, 9]$
 - D. $(-\infty, a) \cup (b, \infty)$, where $a \in [-7, -3]$ and $b \in [-3, 3]$
 - 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.

$$-3 + 4x < \frac{36x + 7}{8} \leq 3 + 4x$$

- A. $(-\infty, a] \cup (b, \infty)$, where $a \in [-9, -7]$ and $b \in [-1, 6]$
 - B. $(-\infty, a) \cup [b, \infty)$, where $a \in [-14, -6]$ and $b \in [3, 6]$
 - C. $(a, b]$, where $a \in [-10, -3]$ and $b \in [1, 7]$
 - D. $[a, b)$, where $a \in [-13, -4]$ and $b \in [3, 6]$
 - E. None of the above.
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