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

   More than 10 units from the number $-5$.

   A. $(-\infty, -15) \cup (5, \infty)$

   B. $(-\infty, -15] \cup [5, \infty)$

   C. $(-15, 5)$

   D. $[-15, 5]$

   E. None of the above

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

   $$-4x - 5 < 3x + 6$$

   A. $(-\infty, a),$ where $a \in [1.4, 2.7]$

   B. $(-\infty, a),$ where $a \in [-3.2, -0.6]$

   C. $(a, \infty),$ where $a \in [-3.57, -0.57]$

   D. $(a, \infty),$ where $a \in [-1.43, 7.57]$

   E. None of the above.

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

   $$-7 + 7x > 8x \text{ or } -7 + 3x < 5x$$

   A. $(-\infty, a) \cup (b, \infty),$ where $a \in [3.5, 9.5]$ and $b \in [6, 8]$

   B. $(-\infty, a) \cup (b, \infty),$ where $a \in [-7, -5]$ and $b \in [-6.5, 1.5]$

   C. $(-\infty, a] \cup [b, \infty),$ where $a \in [3.5, 7.5]$ and $b \in [6, 9]$

   D. $(-\infty, a] \cup [b, \infty),$ where $a \in [-8, -4]$ and $b \in [-4.5, 3.5]$

   E. $(-\infty, \infty)$

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

$$-6 - 8x < \frac{-16x + 7}{6} \leq 5 - 3x$$

A. $(-\infty, a] \cup (b, \infty)$, where $a \in [-5.34, 0.66]$ and $b \in [9.5, 13.5]$

B. $(a, b]$, where $a \in [-2.34, 0.66]$ and $b \in [6.5, 14.5]$

C. $[a, b)$, where $a \in [-1.6, -1.2]$ and $b \in [11.5, 20.5]$

D. $(-\infty, a) \cup [b, \infty)$, where $a \in [-1.9, 0.5]$ and $b \in [8.5, 13.5]$

E. None of the above.

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

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

A. $(-\infty, a] \cup [b, \infty)$, where $a \in [-13, -8]$ and $b \in [-4.33, 3.67]$

B. $(-\infty, a) \cup (b, \infty)$, where $a \in [-2.67, 4.33]$ and $b \in [7, 14]$

C. $(-\infty, a] \cup [b, \infty)$, where $a \in [0.33, 2.33]$ and $b \in [7, 15]$

D. $(-\infty, a) \cup (b, \infty)$, where $a \in [-11, -8]$ and $b \in [-5.33, 4.67]$

E. $(-\infty, \infty)$

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

Less than 7 units from the number 10.

A. $(-3, 17)$

B. $(-\infty, -3) \cup (17, \infty)$

C. $(-\infty, -3] \cup [17, \infty)$

D. $[-3, 17]$

E. None of the above

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

$$4 - 6x < \frac{-20x - 6}{5} \le 4 - 5x$$

A. $(-\infty, a) \cup [b, \infty)$, where $a \in [-4.6, -1.6]$ and $b \in [-7.2, -2.2]$

B. $(a, b]$, where $a \in [-2.6, -1.6]$ and $b \in [-8.2, -2.2]$

C. $[a, b)$, where $a \in [-4.6, 1.4]$ and $b \in [-10.2, -2.2]$

D. $(-\infty, a] \cup (b, \infty)$, where $a \in [-8.6, 0.4]$ and $b \in [-5.2, -1.2]$

E. None of the above.

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

$$\frac{5}{3} - \frac{9}{6}x \le \frac{-3}{7}x - \frac{5}{5}$$

A. $[a, \infty)$, where $a \in [1.49, 3.49]$

B. $(-\infty, a]$, where $a \in [1.49, 6.49]$

C. $[a, \infty)$, where $a \in [-5.49, -0.49]$

D. $(-\infty, a]$, where $a \in [-6.49, 0.51]$

E. None of the above.

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

$$\frac{-6}{2} - \frac{8}{8}x \le \frac{-4}{3}x - \frac{5}{4}$$

A. $(-\infty, a]$, where $a \in [1.25, 8.25]$

B. $[a, \infty)$, where $a \in [-10.25, -3.25]$

C. $[a, \infty)$, where $a \in [4.25, 6.25]$

D. $(-\infty, a]$, where $a \in [-7.25, -3.25]$

E. None of the above.

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

$$4x + 3 \leq 6x - 5$$

A. $(-\infty, a]$, where $a \in [1, 6]$

B. $[a, \infty)$, where $a \in [-5, -2]$

C. $(-\infty, a]$, where $a \in [-8, 0]$

D. $[a, \infty)$, where $a \in [1, 5]$

E. None of the above.

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