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

$$\frac{-6}{9} - \frac{5}{6}x < \frac{-4}{2}x + \frac{3}{3}$$

A. (a, ∞), where $a \in [-1.9, -0.2]$

B. $(-\infty, a)$, where $a \in [-4, 1]$

C. $(-\infty, a)$, where $a \in [0, 2]$

D. (a, ∞), where $a \in [0.5, 2.4]$

E. None of the above.

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

No less than 6 units from the number -6.

A. $(-\infty, -12] \cup [0, \infty)$

B. $(-12, 0)$

C. $(-\infty, -12) \cup (0, \infty)$

D. $[-12, 0]$

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.

$$9 + 7x < \frac{75x + 4}{9} \leq 5 + 8x$$

A. $[a, b)$, where $a \in [-10, -1]$ and $b \in [-18, -8]$

B. $(-\infty, a] \cup (b, \infty)$, where $a \in [-8, -4]$ and $b \in [-15, -11]$

C. $(a, b]$, where $a \in [-10, -1]$ and $b \in [-17, -10]$

D. $(-\infty, a) \cup [b, \infty)$, where $a \in [-8, -1]$ and $b \in [-17, -12]$

E. None of the above.

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

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

A. $(-\infty, a) \cup (b, \infty)$, where $a \in [-3.74, -2.16]$ and $b \in [3.6, 6.3]$

B. $(-\infty, a] \cup [b, \infty)$, where $a \in [-4.65, -3.44]$ and $b \in [1.3, 3.1]$

C. $(-\infty, a) \cup (b, \infty)$, where $a \in [-5.04, -3.94]$ and $b \in [2.7, 3.4]$

D. $(-\infty, a] \cup [b, \infty)$, where $a \in [-3.56, -2.77]$ and $b \in [3.5, 5.1]$

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

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

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

A. (a, ∞), where $a \in [-0.55, 0.07]$

B. $(-\infty, a)$, where $a \in [0.06, 1.29]$

C. (a, ∞), where $a \in [0.1, 0.31]$

D. $(-\infty, a)$, where $a \in [-0.49, 0.02]$

E. None of the above.
