Name : _____ Score : _____

Identifying Solutions

Multi-step: S1

Choose the correct solution that best describes each inequality.

1) $21 \geq \frac{4x}{3} + x > -14$

a) $(-\infty, -6) \cap [9, \infty)$ b) $(-6, 9]$

c) $[-6, 9)$ d) $(-\infty, -6) \cap (9, \infty)$

2) $3(5x + 12) < -9$ or $20 \leq 2(6 + 4x)$

a) $(-\infty, -3)$ b) $[1, \infty)$

c) $(-\infty, -3) \cup [1, \infty)$ d) $(-\infty, -3] \cap (1, \infty)$

3) $-15 \geq 5(-x - 8)$ and

a) $(-\infty, -5]$ b

c) $(-\infty, -5] \cup [8, \infty)$ d

b) $(-\infty, -5)$

d) $(-9, -5)$

5) $\frac{3x - 26}{7} > -8$ or $6 \leq$

a) $(-\infty, -10] \cap (-4, \infty)$ b

c) $[-4, \infty)$ d

d $3(14 + 2x) > -42$

b) $(-\infty, 8)$

d) $(-\infty, -14) \cup (8, \infty)$

7) $-81 \geq 9(5x + 36)$ and $4x - \frac{x}{3} < 22$

a) $(-\infty, -9] \cup (6, \infty)$ b) $(-\infty, 6)$

c) $(-\infty, -9) \cap [6, \infty)$ d) $(-\infty, -9]$

8) $1 \leq \frac{2x - 5}{-29}$ or $\frac{x}{2} - \frac{x}{5} \geq -3$

a) $(-\infty, 10] \cup [12, \infty)$ b) $(-\infty, -10] \cup (12, \infty)$

c) $(-\infty, -12] \cup [-10, \infty)$ d) $(-\infty, -12] \cup [10, \infty)$