Assessment

Lesson-20

Question 1

Rewrite this absolute value inequality as a compound inequality

$|3+4x| \leq 15$

A. $15 \leq 3+4x \leq 15$

B. $-15 \geq 3+4x \leq 15$

C. $-15 \leq 3+4x \geq 15$

D. $-15 \leq 3+4x \leq 15$

Question 2

Solve $|3 - x| < 10$

A. $(-7, 7)$

B. $(-13,13)$

C. $(-7, 13)$

D. $(-13, 7)$

Question 3

Solve $|x - 5| \geq 4$

$x \leq -1$ or $x \geq 1$

$x \leq -9$ or $x \geq 9$

$x \leq 9$ or ≥ -1

$x \leq 1$ *or* $x \geq 9$

Question 4

Solve $|x + 3| < 10$

A. $(-13, 13)$

B. $(-7, 13)$

C. $(-7, 7)$

D. $(-13, 7)$

Question 5

Solve $15 - 3|5x - 6| \geq -9$

A. $[-2.8, 0.4]$

B. $[-2.8, 2.8]$

C. $[-0.4, 0.4]$

D. $[-0.4, 2.8]$

Question 6

Solve $|2x + 4| + 4 < 8$

A. $-4 < x < 0$

B. $x < -4$ or $x > 0$

C. $-\frac{5}{2} < x < 4$

D. $x < 0$

Question 7

Solve $|2x + 2| < 9$

A. $-\frac{11}{2} < x < \frac{7}{2}$

B. $-9 < x < \frac{7}{2}$

C. $-\frac{7}{2} < x < \frac{11}{2}$

D. $x < \frac{7}{2}$

Question 8

Solve $\left|\frac{x-11}{3}\right| \leq 6.$

A. $-7 \geq x \; or \; 2 \leq x$

B. $-29 \leq \mathrm{x} \leq 29$

C. $-7 \leq x \; or \; 29 \leq x$

D. $-7 \leq x \leq 29$

Question 9

Solve $|3x + 2| - 3 > 1$

A. $\left(-2, \frac{2}{3}\right)$

B. $\left(\frac{2}{3}, \infty\right)$

C. $\emptyset$

D. $(-\infty, -2) \cup \left(\frac{2}{3}, \infty\right)$

Question 10

Solve $|6 - 3x| \leq -12$

A. $\left[-2, \frac{2}{3}\right]$

B. $\left[\frac{2}{3}, \infty\right]$

C. ϕ

D. $[-\infty, -2] \cup \left[\frac{2}{3}, \infty\right]$