

NAME: _____

P.I. A2.A.1: Solve absolute value equations involving linear expressions in one variable

Solve:

1. $|2x+5| = 4$

[A] 3, 2 [B] $\frac{1}{2}, -\frac{9}{2}$

[C] $-\frac{1}{2}, -\frac{9}{2}$ [D] 4, 2

2. $|5x-4| = 6$

[A] $-\frac{14}{5}, \frac{6}{5}$ [B] -2, $-\frac{2}{5}$

[C] 2, $-\frac{2}{5}$ [D] $\frac{12}{5}, \frac{6}{5}$

3. $|4x-6| = 5$

[A] $-\frac{17}{4}, \frac{5}{4}$ [B] $\frac{11}{4}, \frac{1}{4}$

[C] $\frac{5}{2}, \frac{5}{4}$ [D] $-\frac{11}{4}, \frac{1}{4}$

4. $|x-4| = 6$

5. $|x-2| = 3$

6. $6 = |-1+6x|$

7. $4 = |2+3x|$

8. $|x+9| = 2$

9. $5 = |-4+2x|$

10. $3 = |-4+3x|$

[1] C

[2] C

[3] B

[4] $\{-2, 10\}$

[5] $\{-1, 5\}$

[6] $\frac{7}{6}, -\frac{5}{6}$

[7] $\frac{2}{3}, -2$

[8] $\{-11, -7\}$

[9] $\frac{9}{2}, -\frac{1}{2}$

[10] $\frac{7}{3}, \frac{1}{3}$