

### A.REI.D.11: Absolute Value Equations 2

- 1 Solve for all values of  $x$ :  $|2x - 5| = 3$
- 2 Solve for all values of  $x$ :  $|3x - 2| = 6$
- 3 Solve for the negative value of  $x$ :  $|2x + 5| + 1 = 13$
- 4 Find the solution set of  $|2x + 1| = 9$ .
- 5 Find the solution set for  $|2x - 1| = 3$ .
- 6 Find the negative root of the equation  $|3x - 2| = 4$ .
- 7 Find the *negative* member of the solution set for  $|2x - 4| = 6$ .
- 8 Solve for  $x$ :  $|5 - 2x| = 7$
- 9 Solve for all values of  $x$ :  $|3x - 1| = 5$
- 10 What is the negative root of the equation  $|2x + 3| = 11$ ?
- 11 Solve for all values of  $x$ :  $|2x - 5| = 7$
- 12 Find the complete solution set of  $|2x - 4| = 8$ .
- 13 Solve for all values of  $x$ :  $|3x - 2| = 16$
- 14 Solve for all values of  $x$ :  $|2x + 5| = 4$
- 15 Solve for the positive value of  $x$ :  $|2x - 3| = 11$
- 16 Solve for all values of  $x$ :  $|2x + 3| = 7$
- 17 What is the solution set of the equation  $|2x - 1| = 5$ ?
- 18 Solve for all values of  $x$ :  $|3x + 5| = 7$
- 19 Solve for the negative value of  $x$ :  $|3x - 1| = 19$
- 20 Solve for the *negative* value of  $x$ :  $|2x - 3| + 1 = 17$
- 21 What is the *negative* value of  $x$  that satisfies the equation  $|3x + 1| = 8$ ?
- 22 What is the solution set of the equation  $|2x + 5| - 4 = 3$ ?
- 23 Find all values of  $x$  that satisfy the equation  $|2x + 3| = 11$ ?

**A.REI.D.11: Absolute Value Equations 2****Answer Section**

1 ANS:

$$1, 4. \quad \begin{array}{l} 2x - 5 = 3 \\ x = 4 \end{array} \quad \begin{array}{l} 2x - 5 = -3 \\ x = 1 \end{array}$$

REF: 010822b

2 ANS:

$$\frac{8}{3}, -\frac{4}{3}. \quad \begin{array}{l} 3x - 2 = 6 \\ x = \frac{8}{3} \end{array} \quad \begin{array}{l} 3x - 2 = -6 \\ x = -\frac{4}{3} \end{array}$$

REF: 080822b

3 ANS:

$$-\frac{17}{2}. \quad \begin{array}{l} |2x + 5| = 12 \\ 2x + 5 = 12 \\ x = \frac{17}{2} \end{array}$$

REF: 080923b

4 ANS:

$$\{-5, 4\}$$

REF: 068413siii

5 ANS:

$$\{-1, 2\}$$

REF: 018505siii

6 ANS:

$$-\frac{2}{3}$$

REF: 068509siii

7 ANS:

$$-1$$

REF: 068704siii

8 ANS:

$$-1, 6$$

REF: 068816siii

9 ANS:

$$2, -\frac{4}{3}$$

REF: 019007siii

10 ANS:

$$-7$$

REF: 069005siii

11 ANS:

$$-1, 6$$

REF: 019404siii

12 ANS:

$$-2, 6$$

REF: 069614siii

13 ANS:

$$6, -\frac{14}{3}$$

REF: 089615siii

14 ANS:

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

REF: 069908siii

15 ANS:

$$7$$

REF: 010003siii

16 ANS:

$$-5, 2$$

REF: 060009siii

17 ANS:

$$-2, 3$$

REF: 080009siii

18 ANS:

$$-4, \frac{2}{3}$$

REF: 060110siii

19 ANS:

$$-6$$

REF: 080101siii

20 ANS:

$$-6\frac{1}{2}$$

REF: 060214siii

21 ANS:

$$-3$$

REF: 010301siii

22 ANS:

$$\{-6, 1\}$$

REF: 060313siii

23 ANS:

$$-7, 4$$

REF: 080305siii