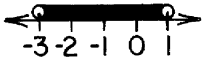

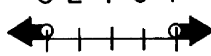
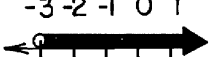

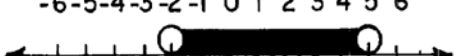
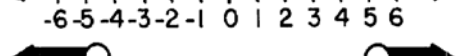
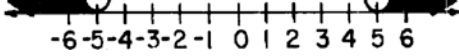


A.REI.D.11: Absolute Value Inequalities 2

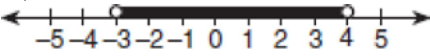
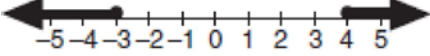
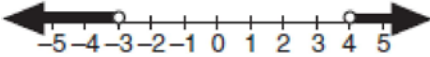
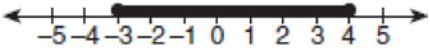
1 Which graph represents the solution set of $|x + 1| < 2$?

- 1) 
- 2) 
- 3) 
- 4) 

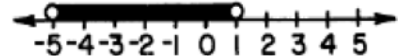
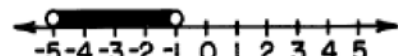
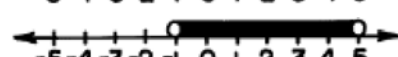
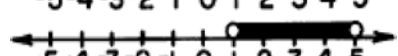
2 Which is the graph of the solution set of $|2x - 3| < 7$?

- 1) 
- 2) 
- 3) 
- 4) 

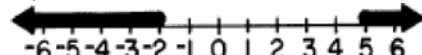
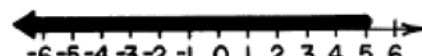
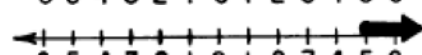
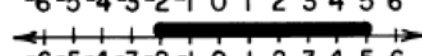
3 Which graph represents the solution set of $|2x - 1| < 7$?

- 1) 
- 2) 
- 3) 
- 4) 

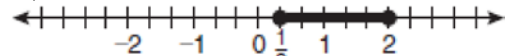
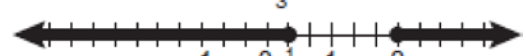
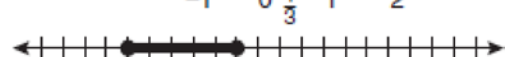
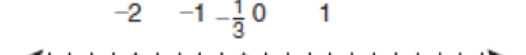
4 Which graph represents the solution set of $|5x - 15| < 10$?

- 1) 
- 2) 
- 3) 
- 4) 





5 Which is the graph of the solution set of $|2x - 3| \leq 7$?

- 1) 
- 2) 
- 3) 
- 4) 

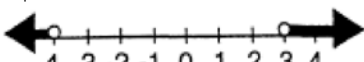
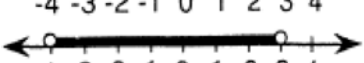
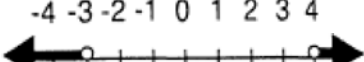
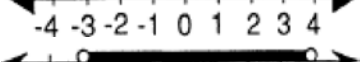
6 Which graph represents the solution set of $|6x - 7| \leq 5$?

- 1) 
- 2) 
- 3) 
- 4) 

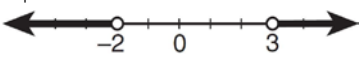

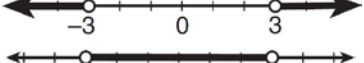
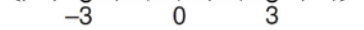
7 Which graph represents the solution set for the inequality $|2x + 3| > 7$?

- 1) 
- 2) 
- 3) 
- 4) 

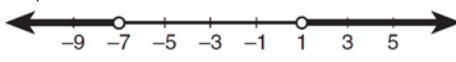
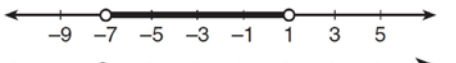
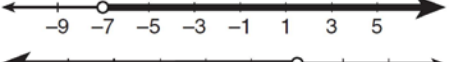
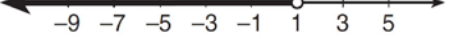
8 Which graph represents the solution set of $|2x + 1| > 7$?

- 1) 
- 2) 
- 3) 
- 4) 


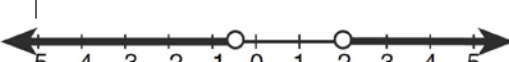
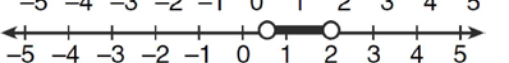
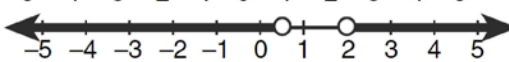
9 What is the graph of the solution set of $|2x - 1| > 5$?

- 1) 
- 2) 
- 3) 
- 4) 

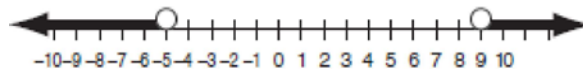
10 Which graph is the solution to the inequality $4|2x + 6| - 5 < 27$?

- 1) 
- 2) 
- 3) 
- 4) 

11 Which graph represents the solution set of $\left| \frac{4x - 5}{3} \right| > 1$?

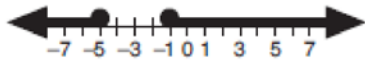
- 1) 
- 2) 
- 3) 
- 4) 

12 The solution set of which inequality is represented by the accompanying graph?



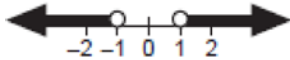
- 1) $|x - 2| > 7$
- 2) $|x - 2| < 7$
- 3) $|2 - x| > -7$
- 4) $|2 - x| < -7$

13 Which inequality is represented by the accompanying graph?



- 1) $|x + 2| > 5$
- 2) $|x + 3| \geq 2$
- 3) $|x - 1| \leq 5$
- 4) $|x - 5| \geq 2$

14 Which inequality is represented by the accompanying graph?

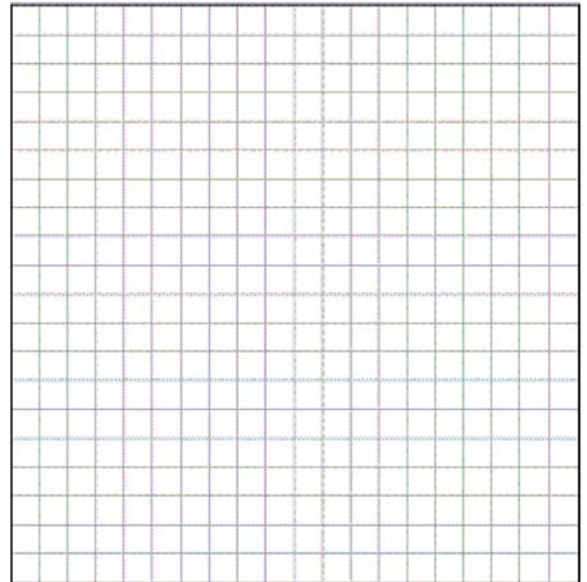


- 1) $|x| > 1$
- 2) $|x| \geq 1$
- 3) $|x| < 1$
- 4) $|x| \leq 1$

15 Solve the inequality $-3|6 - x| < -15$ for x . Graph the solution on the line below.



16 Determine the solution of the inequality $|3 - 2x| \geq 7$. [The use of the grid below is optional.]



A.REI.D.11: Absolute Value Inequalities 2 Answer Section

1 ANS: 1 REF: 068622siii

2 ANS: 2 REF: 088431siii

3 ANS: 1

$$2x - 1 < 7 \quad \text{and} \quad 2x - 1 > -7$$

$$x < 4 \quad x > -3$$

REF: 080303b

4 ANS: 4 REF: 089030siii

5 ANS: 4 REF: 018727siii

6 ANS: 1

$$6x - 7 \leq 5 \quad 6x - 7 \geq -5$$

$$6x \leq 12 \quad 6x \geq 2$$

$$x \leq 2 \quad x \geq \frac{1}{3}$$

REF: fall0905a2

7 ANS: 2

$$2x + 3 > 7 \quad \text{or} \quad 2x + 3 < -7$$

$$x > 2 \quad x < -5$$

REF: 060505b

8 ANS: 1 REF: 089318siii

9 ANS: 1

$$2x - 1 > 5 \quad 2x - 1 < -5$$

$$2x > 6 \quad 2x > -4$$

$$x > 3 \quad x < -2$$

REF: 061307a2

10 ANS: 2

$$4|2x + 6| < 32 \quad 2x + 6 < 8 \quad 2x + 6 > -8$$

$$|2x + 6| < 8 \quad 2x < 2 \quad 2x > -14$$

$$x < 1 \quad x > -7$$

REF: 011612a2

11 ANS: 3

$$\frac{4x-5}{3} > 1 \text{ or } \frac{4x-5}{3} < -1$$

$$4x-5 > 3 \quad 4x-5 < -3$$

$$4x > 8 \quad 4x < 2$$

$$x > 2 \quad x < \frac{1}{2}$$

REF: 061209a2

12 ANS: 1

$$x-2 > 7 \quad \text{or} \quad x-2 < -7$$

$$x > 9 \quad \text{or} \quad x < -5$$

REF: 060617b

13 ANS: 2

$$x+3 \geq 2 \quad \text{or} \quad x+3 \leq -2$$

$$x \geq -1 \quad \text{or} \quad x \leq -5$$

REF: 060707b

14 ANS: 1

$$|x| > 1$$

$$x > 1 \text{ or } x < -1$$

REF: 080806b

15 ANS:

$$-3|6-x| < -15 \quad \cdot \quad \leftarrow \begin{array}{c} \phi \\ | \end{array} \quad \begin{array}{c} \phi \\ | \end{array} \rightarrow$$

$$|6-x| > 5$$

$$6-x > 5 \text{ or } 6-x < -5$$

$$1 > x \text{ or } 11 < x$$

REF: 061137a2

16 ANS:

$$3-2x \geq 7 \quad \text{or} \quad 3-2x \leq -7$$

$$-2x \geq 4 \quad -2x \leq -10$$

$$x \leq -2 \quad x \geq 5$$

REF: 011334a2