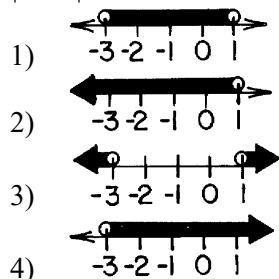
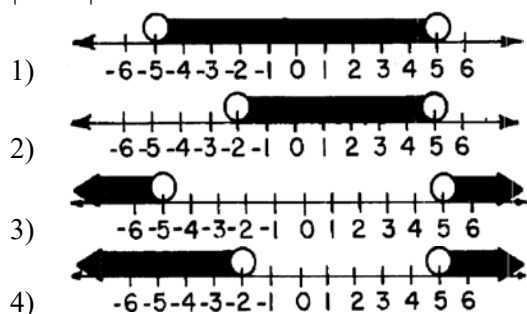


**A2.A.1: Absolute Value Inequalities 3: Solve absolute value equations and inequalities involving linear expressions in one variable**

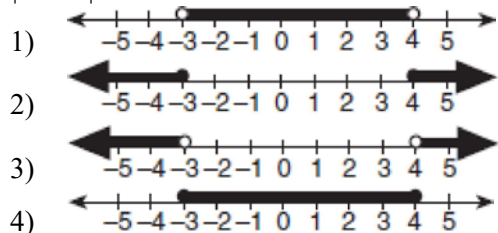
- 1 Which graph represents the solution set of  $|x + 1| < 2$ ?



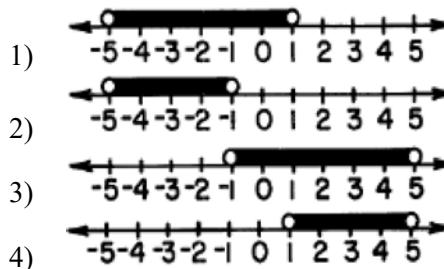
- 2 Which is the graph of the solution set of  $|2x - 3| < 7$ ?



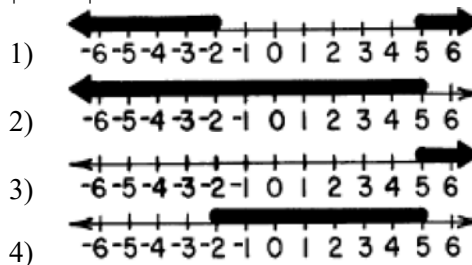
- 3 Which graph represents the solution set of  $|2x - 1| < 7$ ?



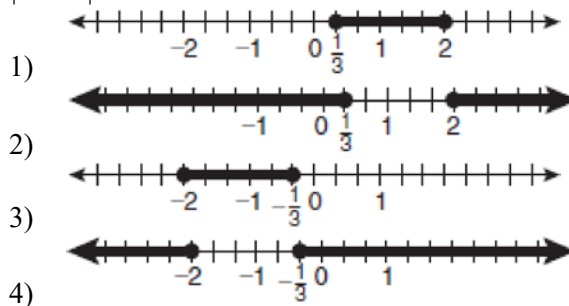
- 4 Which graph represents the solution set of  $|5x - 15| < 10$ ?



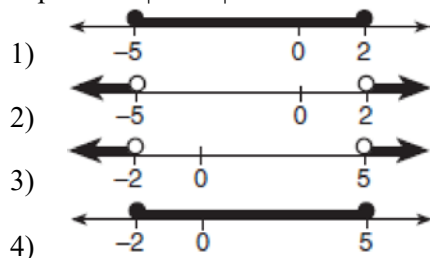
- 5 Which is the graph of the solution set of  $|2x - 3| \leq 7$ ?



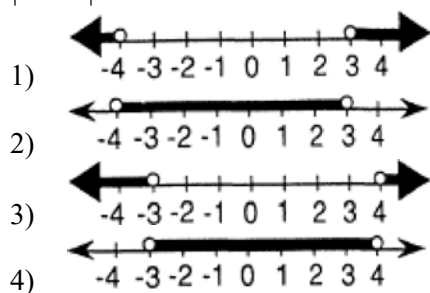
- 6 Which graph represents the solution set of  $|6x - 7| \leq 5$ ?



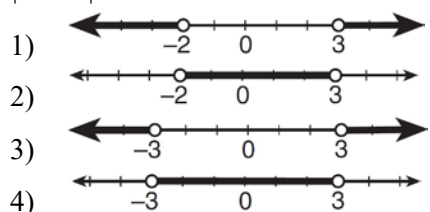
- 7 Which graph represents the solution set for the expression  $|2x + 3| > 7$ ?



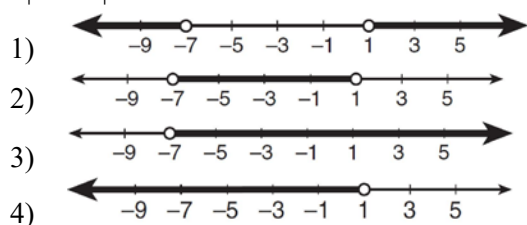
- 8 Which graph represents the solution set of  $|2x + 1| > 7$ ?



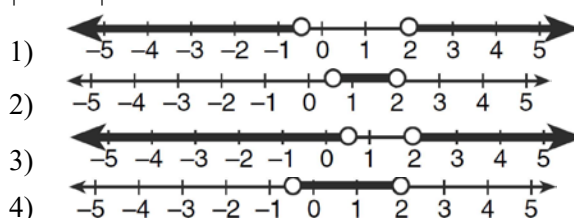
- 9 What is the graph of the solution set of  $|2x - 1| > 5$ ?



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



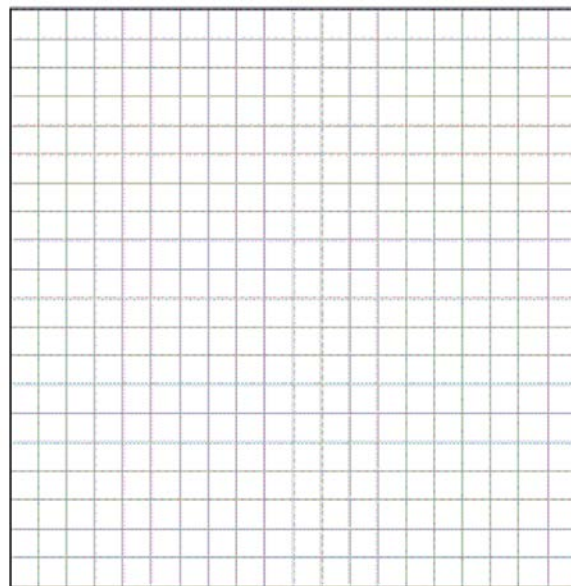
- 11 Which graph represents the solution set of  $\left| \frac{4x - 5}{3} \right| > 1$ ?



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



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



**A2.A.1: Absolute Value Inequalities 3: Solve absolute value equations and inequalities involving linear expressions in one variable**  
**Answer Section**

1 ANS: 1 REF: 068622siii

2 ANS: 2 REF: 088431siii

3 ANS: 1 REF: 080303b

4 ANS: 4 REF: 089030siii

5 ANS: 4 REF: 018727siii

6 ANS: 1 REF: fall0905a2

7 ANS: 2 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

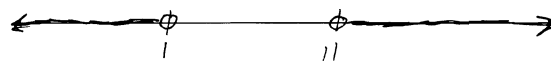
12 ANS:

$$-3|6 - x| < -15$$

$$|6 - x| > 5$$

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

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



REF: 061137a2

13 ANS:

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

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

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

REF: 011334a2