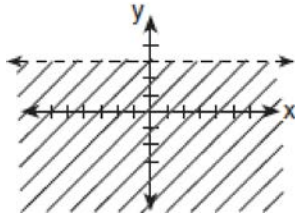
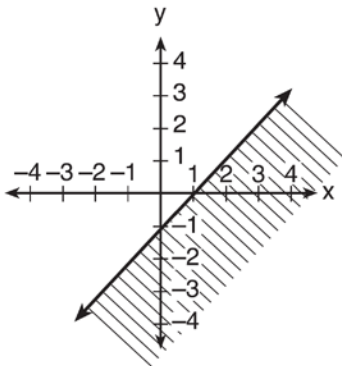


**A.REI.D.12: Graphing Linear Inequalities 1b**

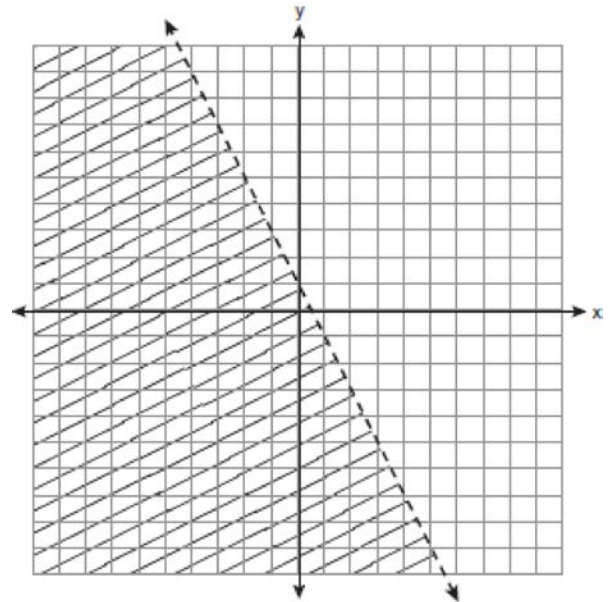
- 1 Which inequality is represented by the accompanying graph?



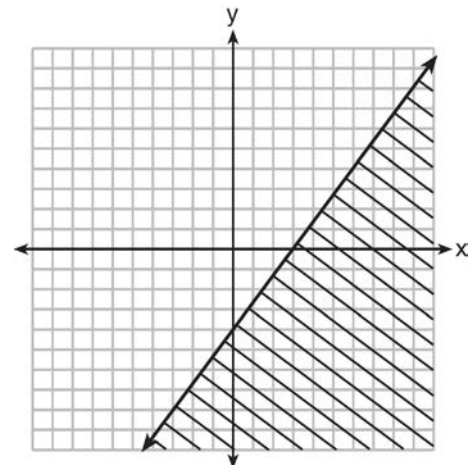
- 2 The diagram below shows the graph of which inequality?



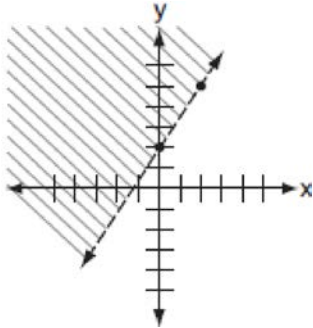
- 3 Which inequality is represented by the graph below?



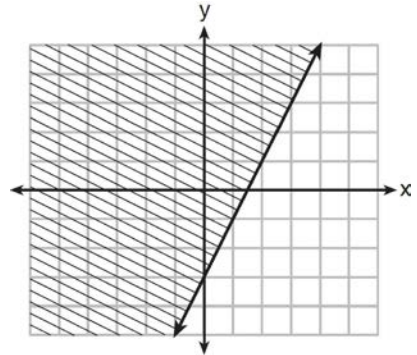
- 4 Which inequality is shown in the graph below?



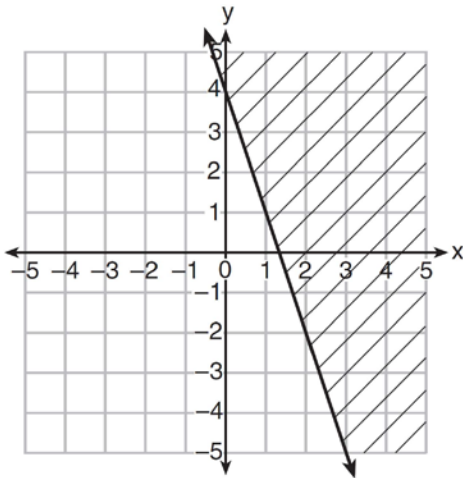
- 5 Which inequality is shown in the accompanying diagram?



- 7 Which inequality is represented by the graph below?



- 6 Which inequality is represented in the graph below?



- 8 In the graph of  $y \leq -x$ , which quadrant is completely shaded?

- 9 Which quadrant will be completely shaded in the graph of the inequality  $y \leq 2x$ ?

- 10 Which ordered pair is *not* in the solution set of  $y > 2x + 1$ ?

- 1) (1,4)
- 2) (1,6)
- 3) (3,8)
- 4) (2,5)

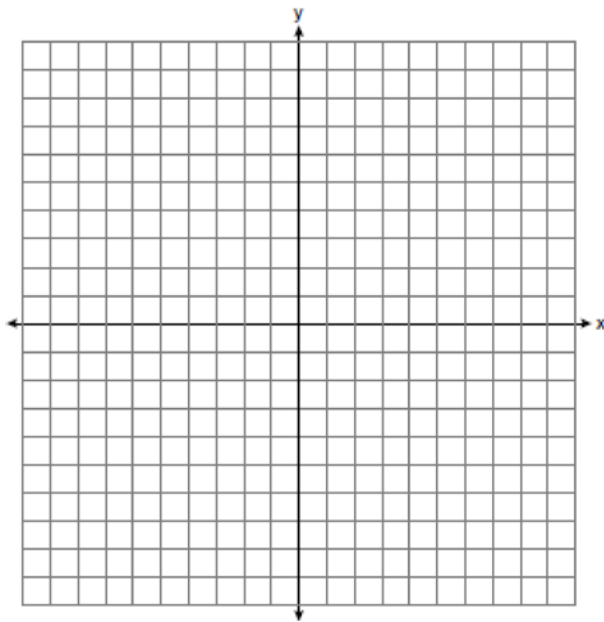
- 11 Which graph represents the solution of  $3y - 9 \leq 6x$ ?

12 Which graph represents the inequality  $y > 3$ ?

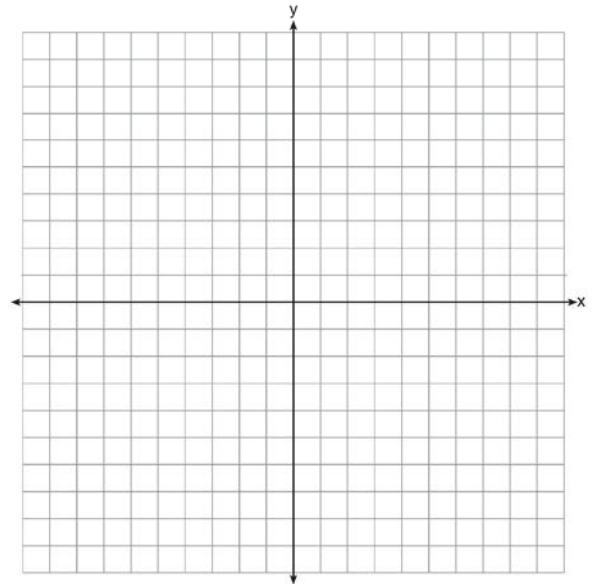
13 Which graph represents the inequality  $y \geq x + 3$ ?

14 Which graph represents the solution of  $2y + 6 > 4x$ ?

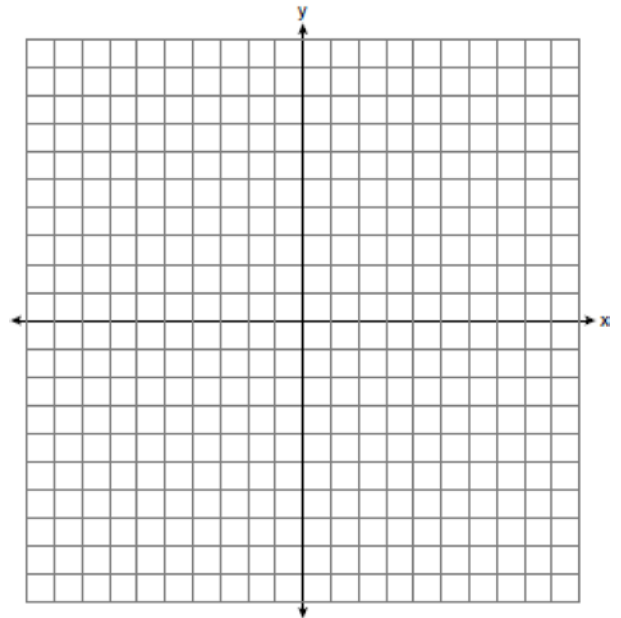
15 Graph the inequality  $y > 2x - 5$  on the set of axes below. State the coordinates of a point in its solution.



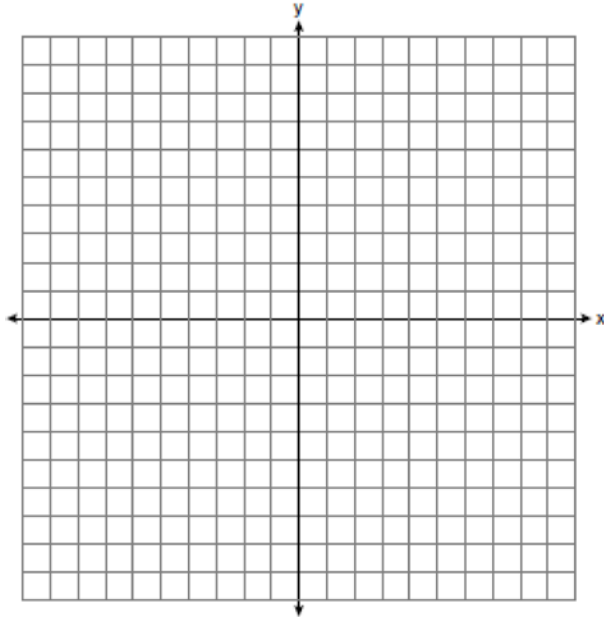
16 On the set of axes below, graph the inequality  $2x + y > 1$ .



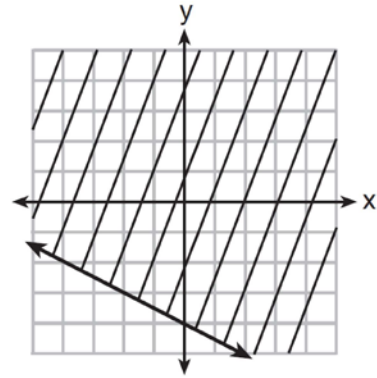
17 Graph the inequality  $y + 4 < -2(x - 4)$  on the set of axes below.



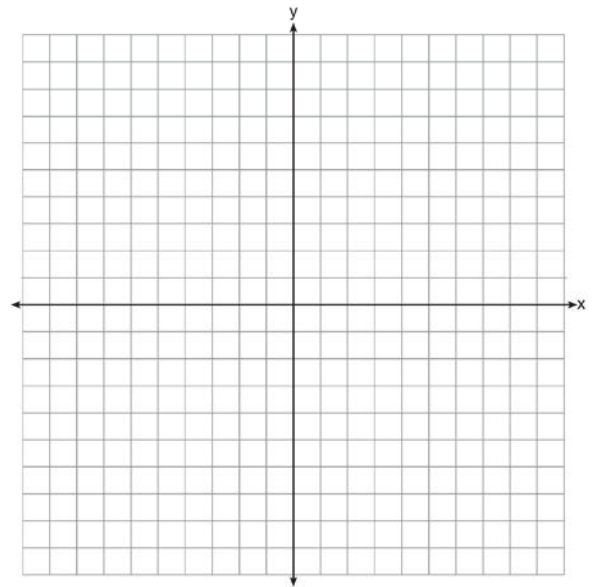
- 18 Graph the solution set for the inequality  $4x - 3y > 9$  on the set of axes below. Determine if the point  $(1, -3)$  is in the solution set. Justify your answer.



- 19 Shawn incorrectly graphed the inequality  $-x - 2y \geq 8$  as shown below.



Explain Shawn's mistake. Graph the inequality correctly on the set of axes below.



**A.REI.D.12: Graphing Linear Inequalities 1b  
Answer Section**

1 ANS:  
 $y < 3$

REF: 010629a

2 ANS:  
 $y \leq x - 1$

REF: 061320ia

3 ANS:  
 $y < -2x + 1$

The slope of the inequality is  $-\frac{1}{2}$ .

REF: fall0720ia

4 ANS:  
 $y \leq \frac{4}{3}x - 4$

REF: 061505ia

5 ANS:  
 $y > \frac{3}{2}x + 2$

REF: 010828a

6 ANS:  
 $y \geq -3x + 4$

REF: 061505ai

7 ANS:  
 $y \geq 2x - 3$

REF: 011605ai

8 ANS:  
III

REF: 080220a

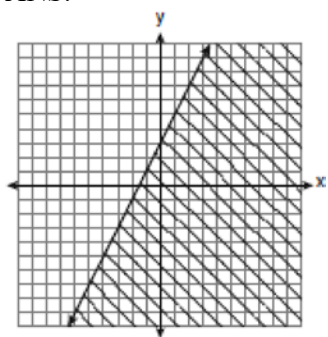
9 ANS:  
Quadrant IV

REF: 061028ia

10 ANS: 4  
 $5 > 2(2) + 1$  is not true.

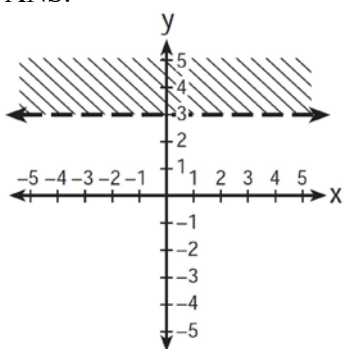
REF: 080513a

11 ANS:



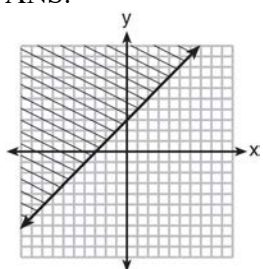
REF: 060920ia

12 ANS:



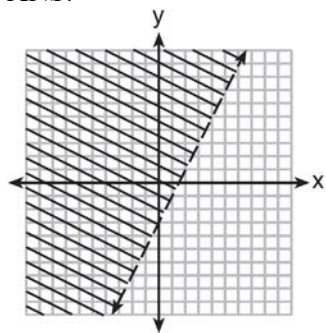
REF: 011210ia

13 ANS:



REF: 081314ia

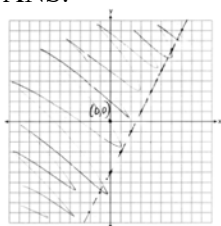
14 ANS:



$$y > 2x - 3$$

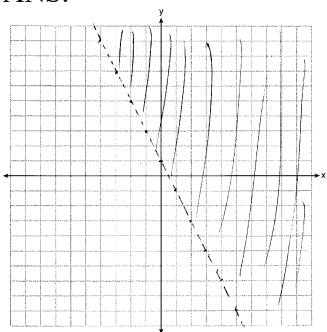
REF: 011422ia

15 ANS:



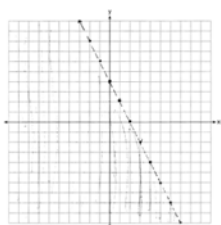
REF: 011729ai

16 ANS:



REF: 081526ai

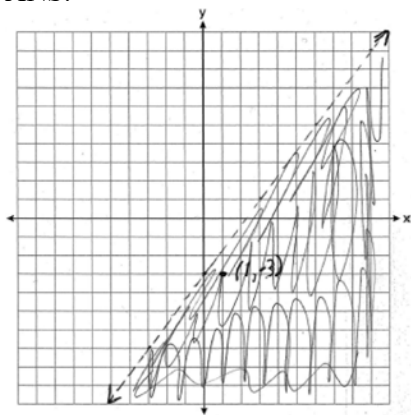
17 ANS:



$$y < -2x + 4$$

REF: 061730ai

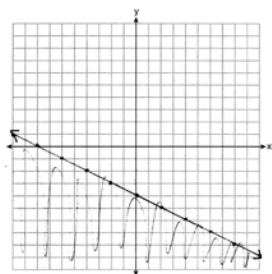
18 ANS:



$(1, -3)$  is in the solution set.  $4(1) - 3(-3) > 9$   
 $4 + 9 > 9$

REF: 011038ia

19 ANS:



REF: 081634ai