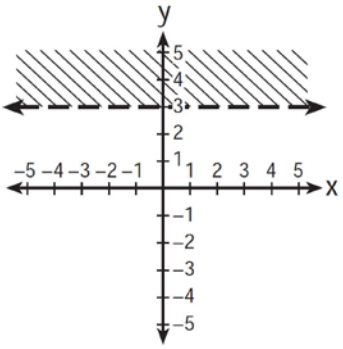
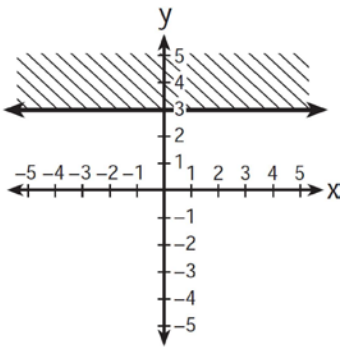
A.REI.D.12: Graphing Linear Inequalities 2

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

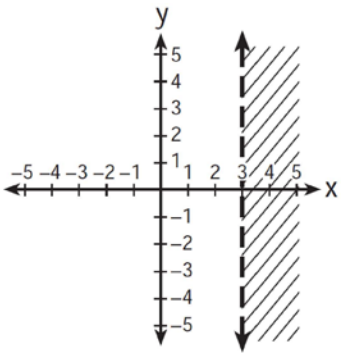
1)



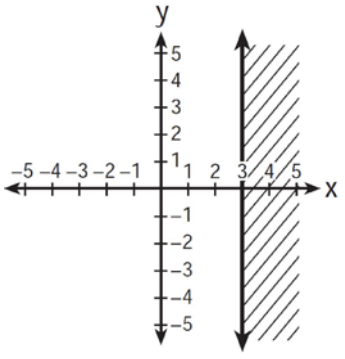
2)



3)

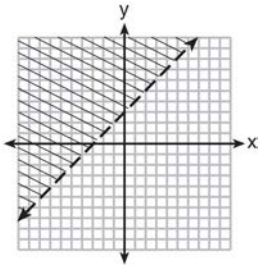


4)

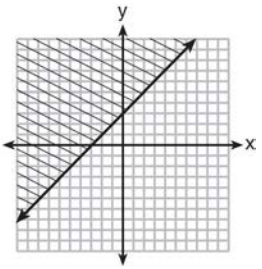


2 Which graph represents the inequality $y \geq x + 3$?

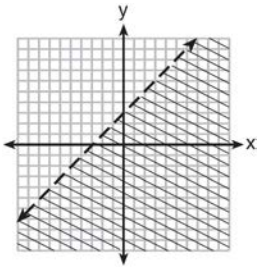
1)



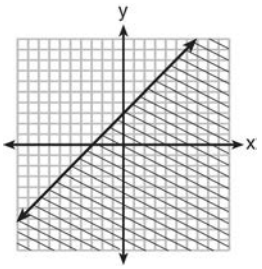
2)



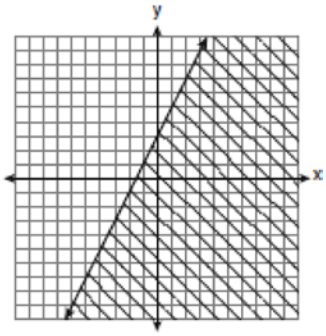
3)

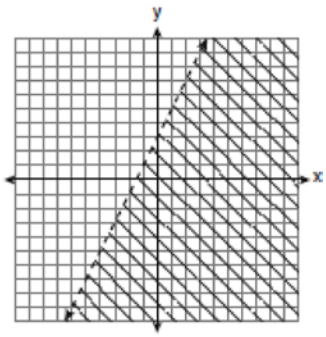


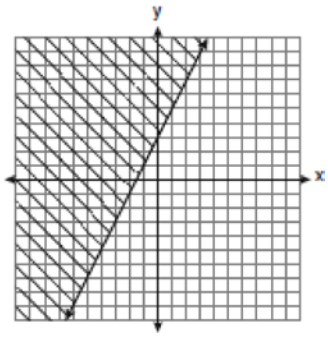
4)

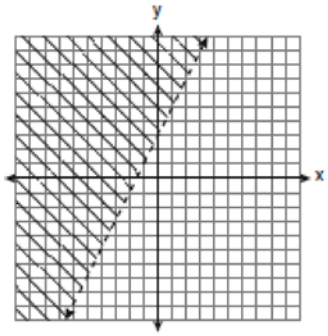


3 Which graph represents the solution of $3y - 9 \leq 6x$?

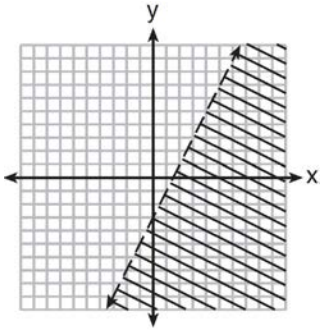
1)


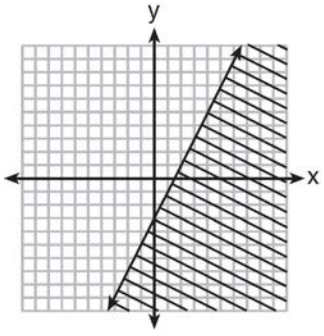
2)


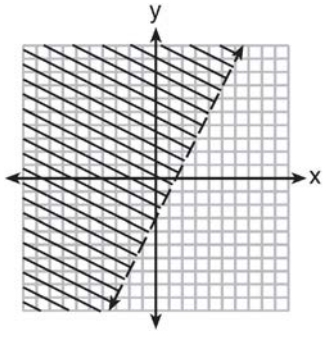
3)


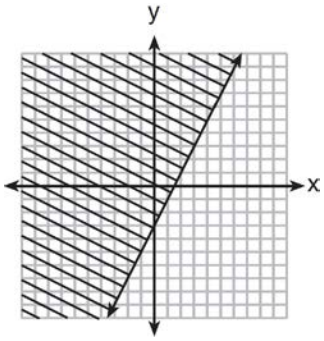
4)


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

1)


2)


3)


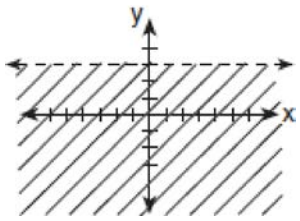
4)


5 In the graph of $y \leq -x$, which quadrant is completely shaded?
1) I
2) II
3) III
4) IV

6 Which quadrant will be completely shaded in the graph of the inequality $y \leq 2x$?
1) Quadrant I
2) Quadrant II
3) Quadrant III
4) Quadrant IV

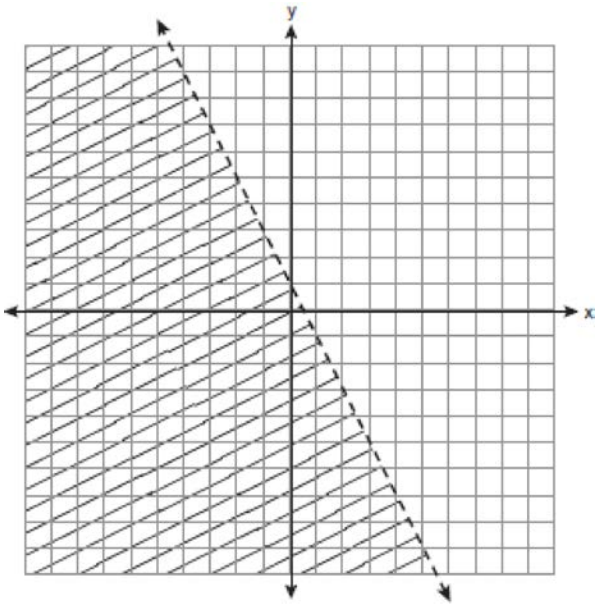
7 Which ordered pair is *not* in the solution set of $y > 2x + 1$?
1) $(1,4)$
2) $(1,6)$
3) $(3,8)$
4) $(2,5)$

8 Which inequality is represented by the accompanying graph?



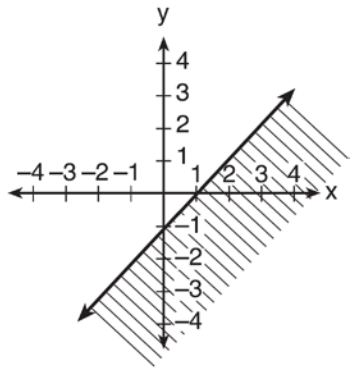
1) $y < 3$
2) $y > 3$
3) $y \leq 3$
4) $y \geq 3$

9 Which inequality is represented by the graph below?



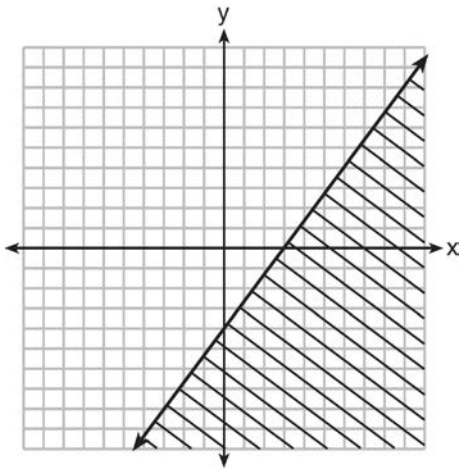
1) $y < 2x + 1$
2) $y < -2x + 1$
3) $y < \frac{1}{2}x + 1$
4) $y < -\frac{1}{2}x + 1$

10 The diagram below shows the graph of which inequality?



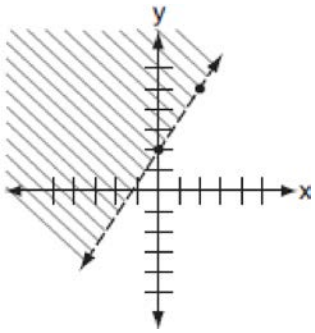
1) $y > x - 1$
2) $y \geq x - 1$
3) $y < x - 1$
4) $y \leq x - 1$

11 Which inequality is shown in the graph below?



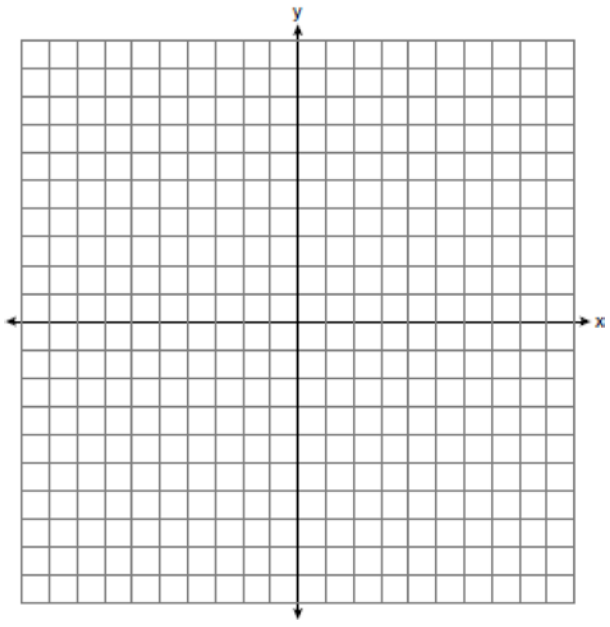
1) $y \leq \frac{4}{3}x + 3$
2) $y \geq \frac{4}{3}x + 3$
3) $y \leq \frac{4}{3}x - 4$
4) $y \geq \frac{4}{3}x - 4$

12 Which inequality is shown in the accompanying diagram?



1) $y > \frac{3}{2}x + 2$
2) $y < \frac{3}{2}x + 2$
3) $y \geq \frac{3}{2}x + 2$
4) $y \leq \frac{3}{2}x + 2$

13 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.



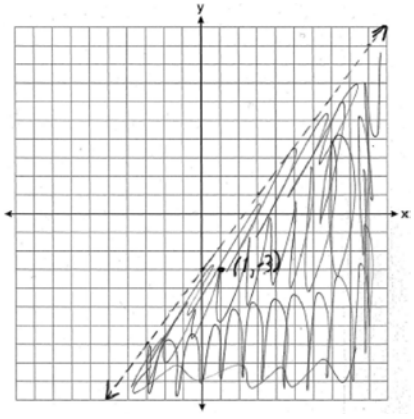
A.REI.D.12: Graphing Linear Inequalities 2
Answer Section

1 ANS: 1 REF: 011210ia
2 ANS: 2 REF: 081314ia
3 ANS: 1 REF: 060920ia
4 ANS: 3
$y > 2x - 3$

REF: 011422ia
5 ANS: 3 REF: 080220a
6 ANS: 4 REF: 061028ia
7 ANS: 4
$5 > 2(2) + 1$ is not true.

REF: 080513a
8 ANS: 1 REF: 010629a
9 ANS: 2
The slope of the inequality is $-\frac{1}{2}$.

REF: fall0720ia
10 ANS: 4 REF: 061320ia
11 ANS: 3 REF: 061505ia
12 ANS: 1 REF: 010828a
13 ANS:



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

$4 + 9 > 9$

REF: 011038ia