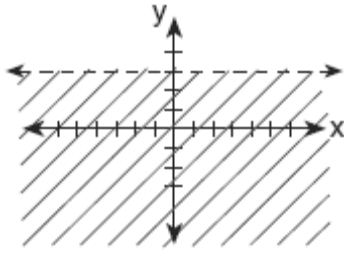


## Lesson 7-5: Linear Inequalities

### Part 1: Graphing Linear Inequalities

1. 010629a, P.I. A.G.6

Which inequality is represented by the accompanying graph?



[A]  $y > 3$

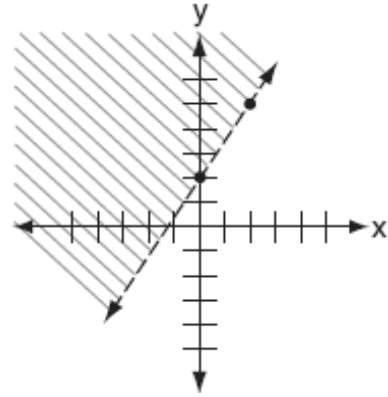
[B]  $y < 3$

[C]  $y \geq 3$

[D]  $y \leq 3$

2. 010828a, P.I. A.G.6

Which inequality is shown in the accompanying diagram?



[A]  $y \geq \frac{3}{2}x + 2$

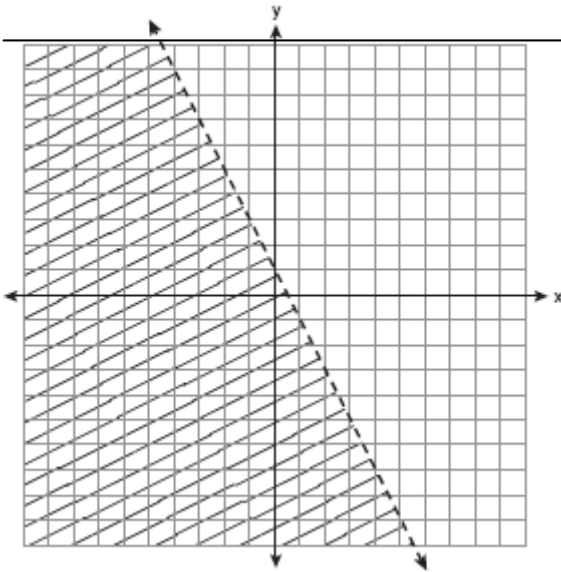
[B]  $y > \frac{3}{2}x + 2$

[C]  $y \leq \frac{3}{2}x + 2$

[D]  $y < \frac{3}{2}x + 2$

3. fall0720ia, P.I. A.G.6

Which inequality is represented by the graph below?



- [A]  $y < -\frac{1}{2}x + 1$       [B]  $y < -2x + 1$   
[C]  $y < \frac{1}{2}x + 1$       [D]  $y < 2x + 1$

4. 080220a

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

- [A] II      [B] I      [C] III      [D] IV

5. 080513a, P.I. A.A.21

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

- [A] (1,4)    [B] (3,8)    [C] (2,5)    [D] (1,6)

### Part 2: Modeling Real World Situations

6. fall0715ia, P.I. A.A.4

An electronics store sells DVD players and cordless telephones. The store makes a \$75 profit on the sale of each DVD player ( $d$ ) and a \$30 profit on the sale of each cordless telephone ( $c$ ). The store wants to make a profit of at least \$255.00 from its sales of DVD players and cordless phones. Which inequality describes this situation?

- [A]  $75d + 30c > 255$       [B]  $75d + 30c < 255$   
[C]  $75d + 30c \geq 255$       [D]  $75d + 30c \leq 255$

[1] B

[2] B

[3] B

[4] C

[5] C

[6] C