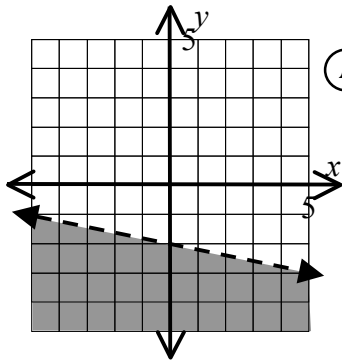


Write the matching inequality or inequalities in the box for each graph A through C.



(A)

$$y > 2x - 2$$

$$y < -2$$

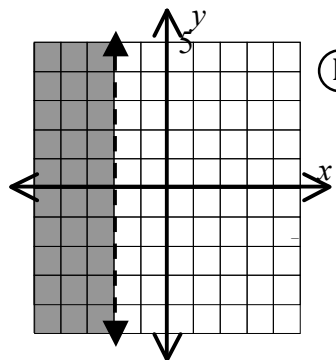
$$5x + y > -2$$

$$x < -2$$

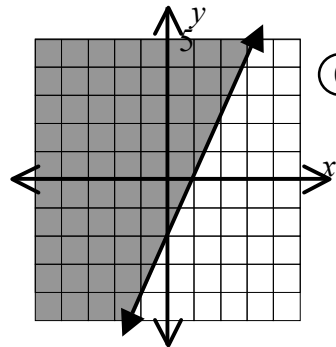
$$y \geq 2x - 2$$

$$-2x + y \geq -2$$

$$y < -\frac{1}{5}x - 2$$



(B)



(C)

**Key:**

(A)  $y < -\frac{1}{5}x - 2$

(B)  $x < -2$

(C)  $y \geq 2x - 2$   
 $-2x + y \geq -2$

**Distractor Analysis:**

$y > 2x - 2$  with Graph A confuses strict inequality with boundary line included.

$y < -2$  with Graph B switches the  $y$ -axis with  $x$ -axis.

$5x + y > -2$  with Graph C confuses slope  $-5$  with slope  $-\frac{1}{5}$ .

**Scoring:**

2 Points      Four correct matches with no incorrect matches

1 Point        Two or three correct matches and one or no incorrect matches

0 Points       Two or more incorrect matches

**Reasoning with Equations and Inequalities**

**A-REI**

Represent and solve equations and inequalities graphically.

12. Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.