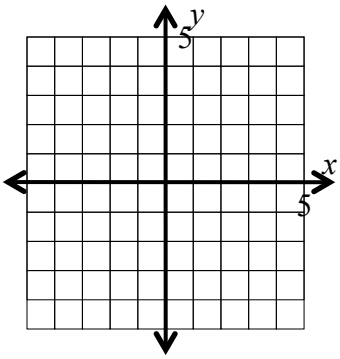
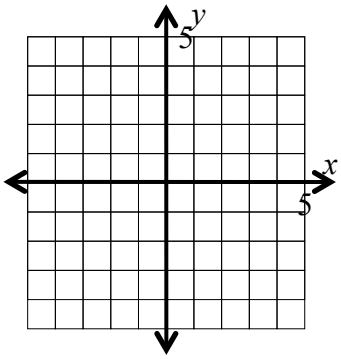
Graph the inequalities. Explain two similarities and two differences between the graphs.

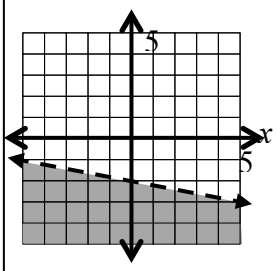


(A) $y < -\frac{1}{5}x - 2$

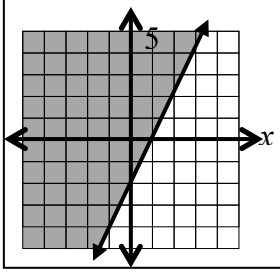


(B) $-2x + y \geq -2$

Sample Top-Score Response:



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



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

Both graphs are shaded regions with multiple solutions. The boundary lines both have y-intercept -2.

Graph A is a strict inequality. The dotted boundary line is not included in the solution. Graph A is shaded down. Graph B is shaded up with a solid boundary line because it is "greater than or equal to." Inequality A has a negative slope and B has a positive slope.

2 Points:

Student graphs both inequalities correctly and describes two similarities two differences between the graphs. Demonstrates understanding of inequalities and boundary lines, *y*-intercept and slope.

1 Point:

- Student graphs both inequalities correctly and describes one similarity and one difference between the graphs.
- Student graphs one inequality correctly and describes one or two similarities and one or two differences between the graphs.

0 Points:

- Student graphs both inequalities incorrectly.
- Student does not describe similarities or differences between the graphs.

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.