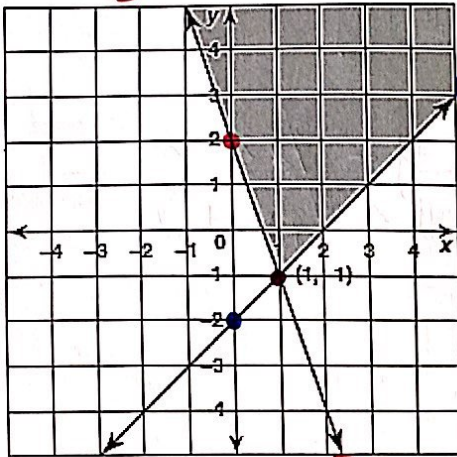


Day 5 - Creating Systems of Inequalities from a Graph - Practice

Name the system of inequalities. Then determine whether the point given is a solution to the system.

1. Line 1: $y \geq x - 2$

Line 2: $y \geq -3x + 2$

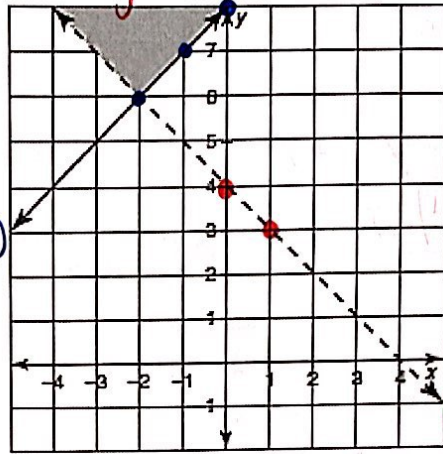


① solid, above \geq

② solid, above \geq

2. Line 1: $y \geq x + 8$

Line 2: $y > -x + 4$



① solid above \geq

② dashed, above $>$

Is the point (1, -1) a solution? Prove why or why not.

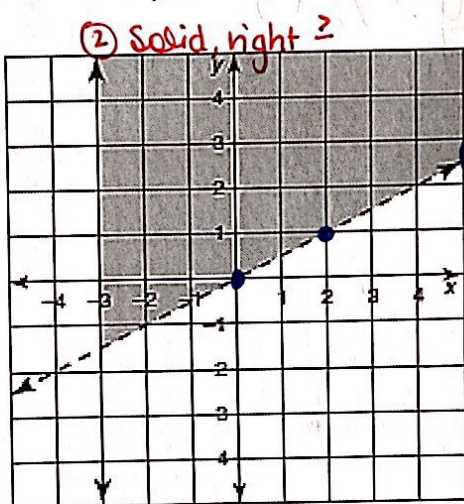
Yes, it falls on both solid lines, which means points on a solid line are solutions.

Is the point (-2, 6) a solution? Prove why or why not.

No, because one of the lines is dashed, which means points on the dashed line are not solutions.

3. Line 1: $y > \frac{1}{2}x$

Line 2: $x \geq -3$



② solid, right \geq

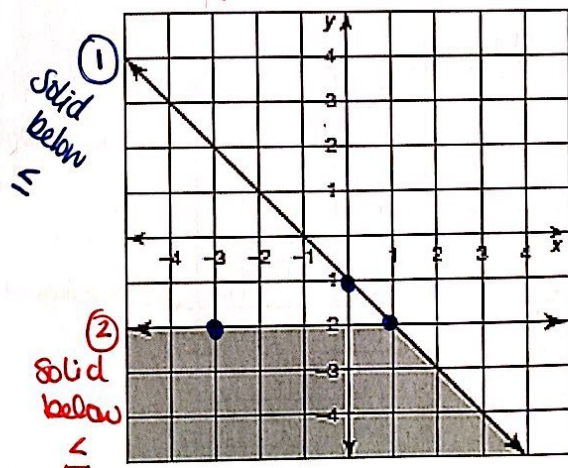
① dashed above $>$

Is (2, 1) a solution? Prove why or why not.

No, because it falls on a dashed line.

4. Line 1: $y \leq -x - 1$

Line 2: $y \leq -2$



① solid below \leq

② solid below \leq

Is (-3, -2) a solution? Prove why or why not.

Yes because it falls on a solid line that has shading immediately below it.