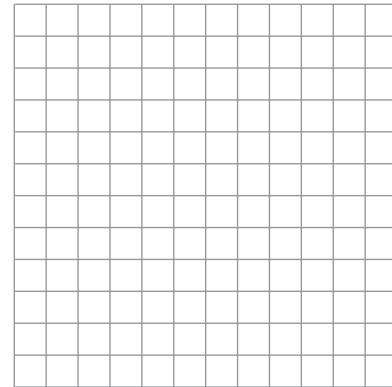


1. Tell whether the lines through the given points are *parallel*, *perpendicular*, or *neither*. Justify your answer.

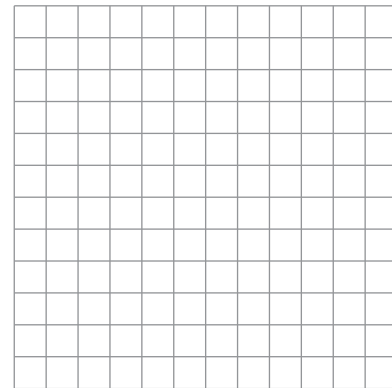
Line 1:  $(2, 0)$ ,  $(-2, 2)$

Line 2:  $(1, -2)$ ,  $(4, 4)$

2. Write an equation of the line passing through point  $P(3, -2)$  that is parallel to  $y = \frac{2}{3}x - 1$ . Graph the equations of the lines to check that they are parallel.



3. Write an equation of the line passing through point  $P(-2, 2)$  that is perpendicular to  $y = 2x + 3$ . Graph the equations of the lines to check that they are perpendicular.



4. Find the distance from point  $A(0, 5)$  to  $y = -3x - 5$ .