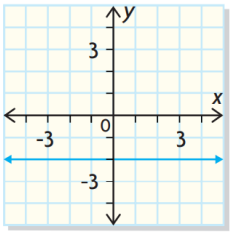
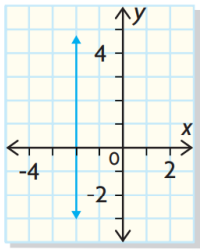
MPM 2D1 Name: _____

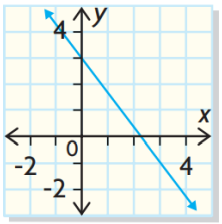
# Other Lines

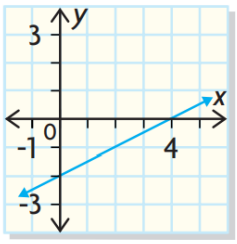
1. Match each equation to its corresponding graph.

a) $x = -2$ b) $y = -2$ c) $y = \frac{1}{2}x - 2$ d) $y = -\frac{4}{3}x + 3$




2. Determine the equation of each line:

a) passing through A(1,9) and B(1,-7)

b) passing through C(-12,7) and F(4,7)

3. Determine which of the following lines are parallel and which are perpendicular to each other.

a) $y = -\frac{1}{3}x + 2$ b) $y = -3x + 2$ c) $y = \frac{7}{2}x - 4$ d) $y = \frac{2}{7}x - 3$

e) $y = \frac{1}{3}x + 3$ f) $y = -\frac{1}{3}x + 1$ g) $y = \frac{-2}{7}x - 9$

4. Are the lines defined by the equations $x = 3$ and $y = 4$ parallel, perpendicular, or neither? Explain.

5. Use the given information to write the equation of each line:

a) A line parallel to the line defined by $y = 3x + 5$ and passing through (3,-5).

b) A line perpendicular to the line defined by $y = 3x + 5$ and passing through (3,-5).

c) A line perpendicular to $4x - 3y = 12$ with the same y-intercept as the line given by $2x - 3y = 6$.