Name:

BECA / Dr. Huson / IB Math 6 Geometry
6.11 Do Now Quiz: Parallel and perpendicular lines

1. Write down the slope perpendicular to the given slope.

   (a) $m = \frac{5}{2}$ $m_\perp =$

   (c) $m = -\frac{7}{3}$ $m_\perp =$

   (b) $m = -\frac{1}{2}$ $m_\perp =$

   (d) $m = 5$ $m_\perp =$

2. The line l has the equation $y = \frac{4}{3}x - 11$. To each line below, circle whether l is parallel, perpendicular, or neither.

   (a) parallel   perpendicular   neither $y = -\frac{4}{3}x + 11$

   (b) parallel   perpendicular   neither $y = -\frac{3}{4}x + 4$

   (c) parallel   perpendicular   neither $3x + 4y = 12$

   (d) parallel   perpendicular   neither $4x - 3y = 6$

   In the following problems, use the point-slope formula: $y - y_A = m(x - x_A)$

3. What is the equation of a line through the point $A(-5, 7)$ and parallel to the line $y = 2x - 12$?

4. What is an equation of the perpendicular bisector of $\overline{QR}$ with $Q(-2, 1)$ and $R(6, 5)$?