Name:

BECA / Dr. Huson / IB Math 6 Geometry

6.11 Do Now Quiz: Parallel and perpendicular lines

HSG.GPE.B.5

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)?