$\qquad$ ICP Parallel and Perpendicular Lines 8-24-15 Hour 356

Goal: Write a line that passes through a given point that is parallel to a given line.
Goal: Write a line that is perpendicular to given line that passes through a particular point.


1. List slope of all lines parallel to given line $\qquad$
2. List slope of all lines perpendicular to given line $\qquad$
3. Determine the equation of the line that is parallel to this given line that passes through the point that does not lie on the given line
4. Determine the equation of the line that is perpendicular to this given line that passes through the point that does not lie on the given line

5. List slope of all lines parallel to given line $\qquad$
6. List slope of all lines perpendicular to given line $\qquad$
7. Determine the equation of the line that is parallel to this given line that passes through the point that does not lie on the given line
8. Determine the equation of the line that is perpendicular to this given line that passes through the point that does not lie on the given line

Goal: Write the equation of a parallel or perpendicular line through a given point (no graph paper)
9. Write the equation of the line that is parallel to $y=\frac{3}{7} x+14$ that passes through $(-8,16)$
10. Write the equation of the line that is perpendicular to $y=-7 x-8$ that passes through $(4,-11)$

