$\qquad$

Sketch the Graph of each equation and determine if the lines are parallel or perpendicular.

1. $y=\frac{-4}{5} x+1$ and $y=\frac{5}{4} x-1$
2. $y=\frac{-3}{5} x+1$ and $y=\frac{-3}{5} x-1$


3. Write the equation, in Slope Intercept Form, of the line that would go through the point $(5,3)$ and would be parallel to the line $\mathbf{y}=\mathbf{- 7 x}-6$.
4. Write the equation, in Slope Intercept Form, of the line that would go through the point $(-1,6)$ and would be parallel to the line $3 x+4 y=12$.
5. Write the equation, in Slope Intercept Form, of the line that would go through the point $(5,3)$ and would be perpendicular to the line $y=\frac{-6}{7} x+5$.
6. Write the equation, in Slope Intercept Form, of the line that would go through the point $(-5,3)$ and would be perpendicular to the line $\mathbf{- 2 x}+\mathbf{3 y}=\mathbf{1 8}$.
7. Determine if the two lines are parallel, perpendicular or just lines that intersect. You may need solve one of the equations for y to determine the slope.
$6 x-4 y=12 \quad$ and $\quad y=\frac{3}{2} x+2$
