Parallel or Perpendicular? | Equations & slopes

1) The equation of two lines are y = -4x + 1 and 4y = x - 8. Are the lines parallel or perpendicular? Justify.

2) Equation of a line *m* is y = 3x + 5. Slope of a line *n* is 3. Prove that the lines are parallel.



5) The equation of two lines are 3y = -2x + 8 and $y = \frac{3}{2}x - 6$. Prove that the lines are perpendicular.