Parallel or Perpendicular? | Equations & slopes

1) If the equation of the line a is $-6x + 2y = 1$, and the equation of the line b is $y = 3x + 5$; then prove that the lines a and b are parallel.

2) The equation of two lines are $y = 7x + 9$ and $-x + 7y = 3$. Are the lines perpendicular? Justify.

3) E

   p

4) If

   t

5) The equation of the line u is $x + 9y = 2$, and the slope of the line v is 9. Are the lines u and v perpendicular? Justify.