Slopes of Parallel and Perpendicular Lines - Guided Lesson

Complete the following problems:

1) The equation for line j can be written as $y = \frac{7}{6}x - 12$.

Line k, which is perpendicular to line j, includes the point (-4, 3). What is the equation of line k?

2) Line c has a slope of $\frac{-6}{3}$. line d has a slope of $\frac{-6}{3}$ are line c and d parallel or perpendicular?

3) The equation for line j can be written as $y = \frac{3}{2}x - 10$. Line k, which is perpendicular to line j, includes the point (-2, 7). What is the equation of line k?