6.4 Classwork: Point-slope form of a linear equation

Point-slope form: $(y - y_1) = m(x - x_1)$

1. Write the linear equation $y - 1 = 2(x - 3)$ in the form $y = mx + c$.

2. A line has a gradient (slope) of $\frac{3}{4}$ and passes through the point $(8, 3)$. Find the equation of the line in the form $y = mx + b$.

3. Find the equation of the line through the points $(1, 3)$ and $(5, 4)$.

4. A line has a gradient (slope) of $\frac{3}{4}$ and passes through the point $(8, 3)$. Find the equation of the line in the form $y = mx + b$.

5. A line has a gradient (slope) of $\frac{2}{3}$ and passes through the point $(9, 3)$. Find the equation of the line in the form $y = mx + b$.

6. A line has a gradient (slope) of $\frac{4}{3}$ and passes through the point $(9, 13)$. Find the equation of the line in the form $y = mx + b$.