Samples **Equation of the line SOLUTIONS**

1. Thus the equation of the line is $y = 10x + c$ and we can substitute the coordinates of the point $(x_1, y_1) = (2, 4)$ into this equation to get the value for c. Hence $4 = 10 \times 2 + c$, so $-16 = c$.

Hence the equation of the line is $y = 10x - 16$.

2. Thus the equation of the line is $y = -8x + c$ and we can substitute the coordinates of the point $(x_1, y_1) = (10, 5)$ into this equation to get the value for c. Hence $5 = -8 \times 10 + c$, so $85 = c$.

Hence the equation of the line is $y = -8x + 85$.

3. Thus the equation of the line is $y = -10x + c$ and we can substitute the coordinates of the point $(x_1, y_1) = (6, 9)$ into this equation to get the value for c. Hence $9 = -10 \times 6 + c$, so $69 = c$.

Hence the equation of the line is $y = -10x + 69$.