**Finding Equations from Two Points**

Find the gradients and equations of the straight lines through these pairs of points. Give your answers in the form $y=mx+c$

**(a)** (0, 0) and (2, 8)

**(b)** (0, 0) and (8, 2)

**(c)** (3, 0) and (5, 6)

**(d)** (3, 0) and (5, 5)

**(e)** (0, 8) and (4, 0)

**(f)** (1, 5) and (3, 1)

Find the gradients and equations of the straight lines through these pairs of points. Give your answers in the form $ax+by=c$ where $a$, $b$ and $c$ are integers.

**(a)** (0, 0) and (4, 2)

**(b)** (0, 1) and (4, 3)

**(g)** (0, 1) and (3, 2)

**(h)** (3, 3) and (9, -3)

**(i)** (2, 4) and (-2, 16)

**(j)** (4, 4) and (-8,-2)

A line L passes through the points A (2, 5) and B (4, 9). Find the equation of the line.

Another line M is perpendicular to line L and passes through B. Find the equation of this line.

A straight line passes through the points (-4, 7), (6, -5) and (8, $t$). Use an algebraic method to find the value of $t$.

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