

National 5 Final Exam Practice

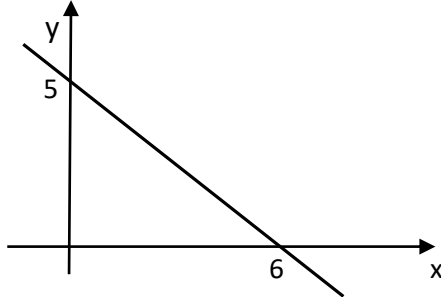
Algebraic Skills

Equation of a Straight Line and Functions

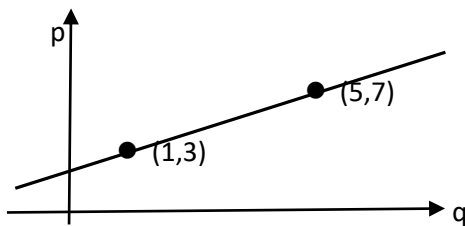
Average Allocation

3 Marks

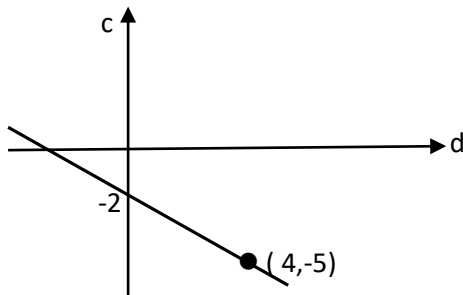
- Find the gradient and y-intercept of the line with equation $x + 2y = 8$.
- A straight line passes through $(5,2)$ and $(9, 14)$. Find the equation of this line. Find the equation of the line shown below.



- A function has equation $f(x) = 15 - 3x$. Find a if $f(a) = 21$.
- Find the points where the line with equation $2x + 3y = 12$ crosses the axes.
- Find the equation of the line below in terms of p and q .



- A straight line has equation $4x - 3y + 9 = 0$. Work out the gradient and y-intercept of the line.
- A function has equation $f(x) = 4x - 9$. If $f(p) = 19$, find the value of p .
- Find the equation of the line with a gradient of 3 and passing through $(-2,1)$.
- A function has equation $f(p) = 8p + 3$. If $f(t) = 43$, find the value of t .
- Sketch the graph with equation $3x + y = 12$, clearly showing where the line crosses both axes.
- A function has equation $h(x) = 8 - 6x$. If $h(p) = 16$ find the value of p . Give your answer in its simplest form.
- A function has equation $f(x) = x^3$. If $f(a) = -27$, find the value of a .
- Find the equation of the line shown below in terms of c and d .



- Find the points where the line with equation $5x + 3y = 15$ crosses both axes.
- Find the equation of the line joining $(-1,3)$ and $(3, -5)$.