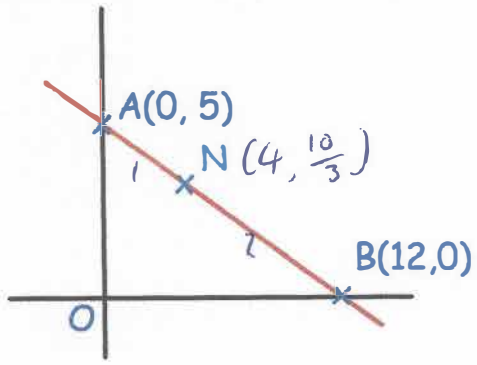
29th April

Corbettmaths



AN:NB = 1:2

Find the equation of the line perpendicular to AB that passes through the point N

gradient of AB = $-\frac{5}{12}$

$y = \frac{12}{5}x + c$

$\frac{10}{3} = \frac{48}{5} + c$

$c = -\frac{94}{15}$

$y = \frac{12}{5}x - \frac{94}{15}$

$\frac{10}{3} - \frac{48}{5}$

$\frac{50}{15} - \frac{144}{15}$

$-\frac{94}{15}$

Work out the value of

$25^{-\frac{3}{2}}$

$\frac{1}{125}$

Expand and simplify

$(\sqrt{10} - \sqrt{3})(\sqrt{15} + \sqrt{2})$

$\sqrt{150} + \sqrt{20} - \sqrt{45} - \sqrt{6}$

$5\sqrt{6} + 2\sqrt{5} - 3\sqrt{5} - \sqrt{6}$

$4\sqrt{6} - \sqrt{5}$

Prove that the sum of the squares of two consecutive integers is one more than double the product of the integers

$n^2 + (n+1)^2$

$n^2 + n^2 + 2n + 1$

$2n^2 + 2n + 1$

$2 \times n(n^2+1)$

$2(n^2+n)$

$2n^2 + 2n$

QED