

S.3 TEST 3: Making subject of the formula

1. Make the letters in the brackets the subject of the formula in the following:

$$(a) \quad 2x = \frac{y + 4}{z} \quad (\mathbf{y})$$

$$(b) \quad A = 2\pi r^2 + 2\pi r h \quad (\mathbf{\pi})$$

$$(c) \quad z = \frac{x}{y} + \frac{1}{2x} \quad (\mathbf{x})$$

$$(d) \quad s = ut + \frac{1}{2}at^2 \quad (\mathbf{t})$$

$$(e) \quad m = \frac{2\pi}{q} \sqrt{\frac{n - t}{k}} \quad (\mathbf{t})$$

$$(f) \quad y = x + \sqrt{\frac{2n}{x - 2nB}} \quad (\mathbf{B})$$

$$(g) \quad p = \frac{a - aq^2}{q^2 - a} \quad (\mathbf{q})$$

$$(h) \quad C = \frac{5(F - 32)}{9} \quad (\mathbf{F})$$

2. (a) Given that; $L = \sqrt{\frac{m^2 - t^2}{px}}$, make t the subject of the formula and hence find the value of t when $m = 1$, $p = 6$, $x = \frac{2}{3}$ and $L = 3$.

(b) Given that; $y = 3\sqrt{x} - 90$, make x the subject of the formula. Hence find the value of x when $y = 3$.

(c) Given that; $h^2 = p^2 + b^2$; make p the subject of the formula and find the value of p if $h = 10$ and $b = 8$.

By Mzee Ian

—END—