IGCSE – Direct and Inverse proportion Paper 2 -2

Oct 01 Paper 2

14 In an electrical circuit the current, I amperes, is directly proportional to the square root of the power, P watts.

$I = 4$ when $P = 100$.

(a) Find an equation connecting I and P.

Answer (a)... [2]

(b) Calculate I when $P = 144$.

Answer (b) I = ... [1]

IGCSE – Direct and Inverse proportion Paper 4 -1

May 06 Paper 4

5 The length, y, of a solid is inversely proportional to the square of its height, x.

(a) Write down a general equation for x and y.
Show that when $x = 5$ and $y = 4.8$ the equation becomes $x^2y = 120$. [2]

(b) Find y when $x = 2$. [1]

(c) Find x when $y = 10$. [2]

(d) Find x when $y = x$. [2]

(e) Describe exactly what happens to y when x is doubled. [2]

(f) Describe exactly what happens to x when y is decreased by 36%. [2]

(g) Make x the subject of the formula $x^2y = 120$. [2]