

Inverse and direct proportionality

210

Name:



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a) y is directly proportional to x .
When $x = 4$, $y = 16$

- i) Find the value of y when $x = 6$
ii) Find the value of x when $y = 48$

Formula

i)

ii)

b) a is directly proportional to b .
When $a = 42$, $b = 7$

- i) Find the value of a when $b = 10$
ii) Find the value of b when $a = 72$

Formula

i)

ii)

c) b is directly proportional to g .
When $b = 4$, $g = 24$

- i) Find the value of b when $g = 66$
ii) Find the value of g when $b = 3.5$
d) p is directly proportional to the
square of n . When $p = 48$, $n = 4$
- i) Find the value of p when $n = 2$
ii) Find the value of n when $p = 147$

Formula

i)

ii)

e) y is inversely proportional to x .
When $x = 8$, $y = 3$

- i) Find the value of y when $x = 6$
ii) Find the value of x when $y = 2$

Formula

i)

ii)

f) a is inversely proportional to b .
When $a = 12$, $b = 5$

- i) Find the value of a when $b = 4$
ii) Find the value of b when $a = 10$

Formula

i)

ii)

g) b is inversely proportional to g .
When $b = 4$, $g = 7$

- i) Find the value of b when $g = 14$
ii) Find the value of g when $b = 56$

Formula

i)

ii)

h) p is inversely proportional to the
square of n . When $p = 2$, $n = 5$

- i) Find the value of p when $n = 10$
ii) Find the value of n when $p = 12.5$

Formula

i)

ii)

Exam question:

y is directly proportional to x^2

When $x = 3$, $y = 45$

Work out the value of x when $y = 980$

