

Name : _____

Missing Values

L2S2

1) The variable d varies jointly with c and f . The value of d is -30 when $c = 5$ and $f = -2$.

a) Write an equation that relates d , c and f . _____

b) Find the value of c when $d = 27$ and $f = 9$. _____

2) The variable y varies inversely with z . The value of y is 6 when $z = 2$.

a) Write an equation that relates y , z and k . _____

b) Find the value of z when $y = 12$. _____

3) The variable s varies directly with t and inversely with u . The value of s is 10 when $t = 15$ and $u = 4$.

a) Write an equation that relates s , t and u . _____

b) Find the value of t when $s = 20$ and $u = 8$. _____

4) The variable g varies directly with h and inversely with f . The value of g is $\frac{3}{8}$ when $h = \frac{1}{4}$ and $f = 4$.

a) Write an equation that relates g , h and f . _____

b) Find the value of h when $g = \frac{1}{2}$ and $f = 6$. _____

5) The variable p varies directly with q and inversely with r . The value of p is 2.5 when $r = 1.5$ and $q = 7.5$.

a) Write an equation that relates r , p and q . _____

b) Find the value of p when $r = 4$ and $q = 3.2$. _____

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Missing Values

L2S2

1) The variable d varies jointly with c and f . The value of d is -30 when $c = 5$ and $f = -2$.

a) Write an equation that relates d , c and f .

$$\underline{d = 3cf}$$

b) Find the value of c when $d = 27$ and $f = 9$.

$$\underline{c = 1}$$

2) The variable y varies inversely with z . The value of y is 6 when $z = 2$.

a) Write an equation that relates y and z .

$$\underline{y = \frac{12}{z}}$$

b) Find the value of z when $y = 4$.

$$\underline{z = \frac{6}{7}}$$

3) The variable s varies directly with t and u .

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when $t = 15$ and $u = 4$.

a) Write an equation that relates s , t and u .

$$\underline{s = 13tu}$$

b) Find the value of u when $s = 117$ and $t = 3$.

$$\underline{u = 9}$$

4) The variable g varies directly with h^2 and inversely with f . The value of g is $\frac{3}{8}$ when $h = \frac{1}{4}$ and $f = 4$.

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value of g is $\frac{3}{8}$ when

$$\underline{g = \frac{24h^2}{f}}$$

a) Write an equation that relates g , h and f .

b) Find the value of g when $h = \frac{1}{2}$ and $f = 3$.

$$\underline{g = 108}$$

5) The variable p varies directly with q and inversely with r . The value of p is 2.5 when $r = 1.5$ and $q = 7.5$.

a) Write an equation that relates r , p and q .

$$\underline{p = \frac{0.5q}{r}}$$

b) Find the value of p when $r = 4$ and $q = 3.2$.

$$\underline{p = 0.4}$$