

Name : _____

Missing Values

L2S3

1) The variable t varies jointly with r and s . The value of t is 750 when $r = 5$ and $s = 10$.

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

b) Find the value of t when $r = 4$ and $s = 8$. _____

2) The variable u varies directly with v . The value of u is 27 when $v = 3$.

a) Write an equation that relates u , v and w . _____

b) Find the value of u when $v = 6$ and $w = 4$. _____

3) The variable y varies jointly with x and z . The value of y is 768 when $x = 4$ and $z = 1$.

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

b) Find the value of y when $x = 6$ and $z = 2$. _____

4) The variable p varies directly with q and inversely with r . The value of p is 12 when $q = 1.2$ and $r = 0.8$.

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

b) Find the value of p when $q = 1.5$ and $r = 0.6$. _____

5) The variable m varies directly with n and inversely with h . The value of m is 32 when $n = 52$ and $h = 13$.

a) Write an equation that relates n , h and m . _____

b) Find the value of m when $n = 36$ and $h = 12$. _____

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Missing Values

L2S3

1) The variable t varies jointly with r and s . The value of t is 750 when $r = 5$ and $s = 10$.

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

$$\underline{t = 15rs}$$

b) Find the value of t when $r = 4$ and $s = 8$.

$$\underline{t = 480}$$

2) The variable u varies directly with v . The value of u is 27 when $v = 3$.

a) Write an equation that relates u and v .

$$\underline{u = 9v}$$

b) Find the value of u when $v = 6$.

$$\underline{u = 54}$$

3) The variable y varies jointly with x and z . The value of y is 768 when $x = 4$ and $z = 1$.

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

$$\underline{y = \frac{12x^3}{z}}$$

b) Find the value of y when $x = 2$ and $z = 3$.

$$\underline{y = 12}$$

4) The variable p varies directly with q and inversely with r . The value of p is 40 when $q = 1.2$ and $r = 0.8$.

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

$$\underline{p = 40qr}$$

b) Find the value of p when $q = 3$ and $r = 2.5$.

$$\underline{p = 300}$$

5) The variable m varies directly with n and inversely with h . The value of m is 32 when $n = 52$ and $h = 13$.

a) Write an equation that relates n , h and m .

$$\underline{m = \frac{8n}{h}}$$

b) Find the value of m when $n = 36$ and $h = 12$.

$$\underline{m = 24}$$

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