

Joint Variation (1)

Name: _____ Class: _____ (_____) Date: _____

Question	1. Given that y varies jointly as x and z . When $x=2$ and $z=3, y=48$. Express y in terms of x and z .	2. Given that x varies directly as s and t^3 . When $s=4$ and $t=1, x=4$. Express x in terms of s and t .	3. Given that z varies as x and \sqrt{y} . When $x=4$ and $y=9, z=18$. Express z in terms of x and y .
1. Write down an equation connecting the variables (including the variation constant k)			
2. Substitute the values of the variables to find k			
3. Write down an equation connecting the variables again (substituting the value of k)			

Joint Variation (2)

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Question	4. Given that z varies as x and inversely as y . When $x=3$ and $y=6$, $z=4$. Express z in terms of x and y .	5. Given that P varies as x^2 and inversely as y . When $x=3$ and $y=36$, $P=8$. Express P in terms of x and y .	6. Given that z varies inversely as \sqrt{s} and t^3 . When $s=64$ and $t=2$, $z=\frac{1}{4}$. Express z in terms of s and t .
1. Write down an equation connecting the variables (including the variation constant k)			
2. Substitute the values of the variables to find k			
3. Write down an equation connecting the variables again (substituting the value of k)			