

Direct Variation (1)

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

Question	1. Given that y varies directly as x^2 . When $x = 2$, $y = 24$. Express y in terms of x .	2. Given that y varies as x . When $x = 6$, $y = 2$. Express y in terms of x .	3. Given that y varies directly as x^3 . When $x = 3$, $y = 54$. Express y in terms of x .	4. Given that y varies directly as \sqrt{x} . When $x = 16$, $y = 2$. Express y in terms of x .
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)				

Direct Variation (2)

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

Question	5. Give that z varies as x^4 . When $x = 3$, $z = 27$. Express z in terms of x .	6. Given that A varies as x^2 . When $x = 4$, $A = 20$. Express A in terms of x .	7. Given that P varies as \sqrt{n} . When $n = 100$, $P = 25$. Express P in terms of n .	8. Given that s varies as t^3 . When $t = 4$, $s = 32$. Express s in terms of 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)				

Inverse Variation (1)

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

Question	1. Given that y varies inversely as x . When $x=2$, $y=6$. Express y in terms of x .	2. Given that y varies inversely as x^2 . When $x=3$, $y=4$. Express y in terms of x .	3. Given that y varies inversely as \sqrt{x} . When $x=4$, $y=5$. Express y in terms of x .	4. Given that y varies inversely as x^3 . When $x=2$, $y=0.5$. Express y in terms of x .
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)				

Inverse Variation (2)

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

Question	5. Given that P varies inversely as x . When $x=2$, $P=15$. Express P in terms of x .	6. Given that S varies inversely as n^2 . When $n=5$, $S=1$. Express S in terms of n .	7. Given that z varies inversely as \sqrt{x} . When $x=361$, $z=106$. Express z in terms of x .	8. Given that L varies inversely as t^3 . When $t=2$, $L=\frac{2}{3}$. Express L in terms of 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)				