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)				