

Inverse Proportion

Question	Equation	Find k	New Equation	Find Value using Equation
A is inversely proportional to B^2 , and when $A = 6, B = 5$. Find A when $B = 2$	$A = \frac{k}{B^2}$	$6 = \frac{k}{5^2}$ so $k = 150$	$A = \frac{150}{B^2}$	$A = \frac{150}{2^2} = 37.5$
(a) y is inversely proportional to x^2 and when $y = 10, x = 2$. Find y when $x = 5$				
(b) y is inversely proportional to x^3 , and $y = 5$ when $x = 3$. Find y when $x = 10$				
(c) A is inversely proportional to \sqrt{B} and when $A = 90, B = 9$. Find A when $B = 25$				
(d) h is inversely proportional to V^2 and $h = 3$ when $V = 8$. Find h when $V = 4$	(e) B is inversely proportional to \sqrt{C} , and when $B = 18, C = 16$. Find B when $C = 0.36$	(f) y is inversely proportional to x^3 , and $y = 20$ when $x = 6$. Find x when $y = 67.5$	(g) y is inversely proportional to $\sqrt[3]{x}$. When $x = 8, y = 4$, find x when $y = 0.8$	