

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