

Fill in the Blanks

Inverse Proportion

General Statement	General Equation	Table of Values	Value of k	Specific Equation	When $x = 6$, $y = ?$	When $y = 10$, $x = ?$								
$y \propto \frac{1}{x}$	$y = \frac{k}{x}$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>4</td> <td>8</td> </tr> <tr> <td>y</td> <td>48</td> <td></td> <td></td> </tr> </table>	x	1	4	8	y	48			$k = 48$	$y = \frac{48}{x}$	$y = \frac{48}{6} = 8$	$x = \frac{48}{10} = 4.8$
x	1	4	8											
y	48													
$y \propto \frac{1}{x}$	$y = \frac{k}{x}$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>5</td> </tr> <tr> <td>y</td> <td>120</td> <td></td> <td>24</td> </tr> </table>	x	1	2	5	y	120		24				$x = \frac{120}{10} = 12$
x	1	2	5											
y	120		24											
		<table border="1"> <tr> <td>x</td> <td>1</td> <td>5</td> <td>10</td> </tr> <tr> <td>y</td> <td></td> <td></td> <td></td> </tr> </table>	x	1	5	10	y					$y = \frac{30}{x}$		$x = \frac{30}{10} = 3$
x	1	5	10											
y														
$y \propto \frac{1}{x}$		<table border="1"> <tr> <td>x</td> <td>5</td> <td>20</td> <td>100</td> </tr> <tr> <td>y</td> <td></td> <td>30</td> <td></td> </tr> </table>	x	5	20	100	y		30					
x	5	20	100											
y		30												
$y \propto \frac{1}{x^2}$	$y = \frac{k}{x^2}$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>y</td> <td></td> <td></td> <td>40</td> </tr> </table>	x	1	2	3	y			40	$k = 360$			$x = \sqrt{\frac{360}{10}} = 6$
x	1	2	3											
y			40											
$y \propto \frac{1}{x^2}$		<table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>10</td> </tr> <tr> <td>y</td> <td></td> <td></td> <td>3</td> </tr> </table>	x	1	2	10	y			3				
x	1	2	10											
y			3											
		<table border="1"> <tr> <td>x</td> <td>1</td> <td>5</td> <td>10</td> </tr> <tr> <td>y</td> <td></td> <td>4</td> <td></td> </tr> </table>	x	1	5	10	y		4		$k = 20$			
x	1	5	10											
y		4												