

Fill in the Blanks

Direct Proportion

General Statement	General Equation	Table of Values	Value of k	Specific Equation	When $x = 5$, $y = ?$	When $y = 24$, $x = ?$								
$y \propto x$	$y = kx$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>10</td> </tr> <tr> <td>y</td> <td>3</td> <td>6</td> <td>30</td> </tr> </table>	x	1	2	10	y	3	6	30	$k = 3$	$y = 3x$	$y = 3 \times 5$ $y = 15$	$24 = 3 \times x$ $x = 8$
x	1	2	10											
y	3	6	30											
$y \propto x$	$y = kx$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>10</td> </tr> <tr> <td>y</td> <td>8</td> <td>16</td> <td>80</td> </tr> </table>	x	1	2	10	y	8	16	80	$k = 8$	$y = 8x$	$y = 8 \times 5$ $y = 40$	$x = 3$
x	1	2	10											
y	8	16	80											
$y \propto x$	$y = kx$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>10</td> </tr> <tr> <td>y</td> <td>2.5</td> <td>5</td> <td>25</td> </tr> </table>	x	1	2	10	y	2.5	5	25	$k = 2.5$	$y = 2.5x$	$y = 2.5 \times 5$ $y = 12.5$	$24 = 2.5 \times x$ $x = 9.6$
x	1	2	10											
y	2.5	5	25											
$y \propto x$	$y = kx$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>10</td> </tr> <tr> <td>y</td> <td>5</td> <td>10</td> <td>50</td> </tr> </table>	x	1	2	10	y	5	10	50	$k = 5$	$y = 5x$	$y = 5 \times 5$ $y = 25$	$24 = 5 \times x$ $x = 4.8$
x	1	2	10											
y	5	10	50											
$y \propto x^2$	$y = kx^2$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>10</td> </tr> <tr> <td>y</td> <td>6</td> <td>24</td> <td>600</td> </tr> </table>	x	1	2	10	y	6	24	600	$k = 6$	$y = 6x^2$	$y = 6 \times 5^2$ $y = 150$	$24 = 6 \times x^2$ $x = 2$
x	1	2	10											
y	6	24	600											
$y \propto x^2$	$y = kx^2$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>10</td> </tr> <tr> <td>y</td> <td>1.5</td> <td>6</td> <td>150</td> </tr> </table>	x	1	2	10	y	1.5	6	150	$k = 1.5$	$y = 1.5x^2$	$y = 1.5 \times 5^2$ $y = 37.5$	$24 = 1.5 \times x^2$ $x = 4$
x	1	2	10											
y	1.5	6	150											
$y \propto x$	$y = kx$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>10</td> </tr> <tr> <td>y</td> <td>0.5</td> <td>1</td> <td>5</td> </tr> </table>	x	1	2	10	y	0.5	1	5	$k = 0.5$	$y = 0.5x$	$y = 0.5 \times 5$ $y = 2.5$	$24 = 0.5 \times x$ $x = 48$
x	1	2	10											
y	0.5	1	5											