

Fill in the Blanks

More Direct Proportion

General Statement	General Equation	Table of Values	Value of k	Specific Equation								
$y \propto x^3$	$y = kx^3$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>4</td> </tr> <tr> <td>y</td> <td>3</td> <td>24</td> <td>192</td> </tr> </table>	x	1	2	4	y	3	24	192	$k = 3$	$y = 3x^3$
x	1	2	4									
y	3	24	192									
$y \propto \sqrt{x}$	$y = k\sqrt{x}$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>4</td> <td>25</td> </tr> <tr> <td>y</td> <td>12</td> <td>24</td> <td>60</td> </tr> </table>	x	1	4	25	y	12	24	60	$k = 12$	$y = 12\sqrt{x}$
x	1	4	25									
y	12	24	60									
$y \propto x$	$y = kx$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>4</td> <td>10</td> </tr> <tr> <td>y</td> <td>0.75</td> <td>3</td> <td>7.5</td> </tr> </table>	x	1	4	10	y	0.75	3	7.5	$k = 0.75$	$y = 0.75x$
x	1	4	10									
y	0.75	3	7.5									
$y \propto \sqrt[3]{x}$	$y = k\sqrt[3]{x}$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>8</td> <td>125</td> </tr> <tr> <td>y</td> <td>10</td> <td>20</td> <td>50</td> </tr> </table>	x	1	8	125	y	10	20	50	$k = 10$	$y = 10\sqrt[3]{x}$
x	1	8	125									
y	10	20	50									
$y \propto x^2$	$y = kx^2$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>4</td> <td>10</td> </tr> <tr> <td>y</td> <td>2</td> <td>32</td> <td>200</td> </tr> </table>	x	1	4	10	y	2	32	200	$k = 2$	$y = 2x^2$
x	1	4	10									
y	2	32	200									
$y \propto \sqrt{x}$	$y = k\sqrt{x}$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>4</td> <td>25</td> </tr> <tr> <td>y</td> <td>1.5</td> <td>3</td> <td>7.5</td> </tr> </table>	x	1	4	25	y	1.5	3	7.5	$k = 1.5$	$y = 1.5\sqrt{x}$
x	1	4	25									
y	1.5	3	7.5									
$y \propto x^2$	$y = kx^2$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>4</td> <td>6</td> </tr> <tr> <td>y</td> <td>$\frac{2}{3}$</td> <td>$\frac{32}{3}$</td> <td>24</td> </tr> </table>	x	1	4	6	y	$\frac{2}{3}$	$\frac{32}{3}$	24	$k = \frac{2}{3}$	$y = \frac{2}{3}x^2$
x	1	4	6									
y	$\frac{2}{3}$	$\frac{32}{3}$	24									
$y \propto x^3$	$y = kx^3$	<table border="1"> <tr> <td>x</td> <td>2</td> <td>$\sqrt{5}$</td> <td>3</td> </tr> <tr> <td>y</td> <td>$8\sqrt{5}$</td> <td>25</td> <td>$27\sqrt{5}$</td> </tr> </table>	x	2	$\sqrt{5}$	3	y	$8\sqrt{5}$	25	$27\sqrt{5}$	$k = \sqrt{5}$	$y = \sqrt{5}x^3$
x	2	$\sqrt{5}$	3									
y	$8\sqrt{5}$	25	$27\sqrt{5}$									
$y \propto \sqrt[3]{x}$	$y = k\sqrt[3]{x}$	<table border="1"> <tr> <td>x</td> <td>1</td> <td>8</td> <td>64</td> </tr> <tr> <td>y</td> <td>a</td> <td>$2a$</td> <td>$4a$</td> </tr> </table>	x	1	8	64	y	a	$2a$	$4a$	$k = a$	$y = a\sqrt[3]{x}$
x	1	8	64									
y	a	$2a$	$4a$									