

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></td> <td></td> </tr> </table> | x | 1 | 2 | 4 | y | 3 | | | $k = 3$ | |
| x | 1 | 2 | 4 | | | | | | | | | |
| y | 3 | | | | | | | | | | | |
| $y \propto \sqrt{x}$ | | <table border="1"> <tr> <td>x</td> <td>1</td> <td>4</td> <td>25</td> </tr> <tr> <td>y</td> <td></td> <td>24</td> <td></td> </tr> </table> | x | 1 | 4 | 25 | y | | 24 | | | |
| x | 1 | 4 | 25 | | | | | | | | | |
| y | | 24 | | | | | | | | | | |
| $y \propto x$ | | <table border="1"> <tr> <td>x</td> <td>1</td> <td>4</td> <td>10</td> </tr> <tr> <td>y</td> <td></td> <td>3</td> <td></td> </tr> </table> | x | 1 | 4 | 10 | y | | 3 | | | |
| x | 1 | 4 | 10 | | | | | | | | | |
| y | | 3 | | | | | | | | | | |
| | $y = k\sqrt[3]{x}$ | <table border="1"> <tr> <td>x</td> <td>1</td> <td>8</td> <td>125</td> </tr> <tr> <td>y</td> <td></td> <td>20</td> <td></td> </tr> </table> | x | 1 | 8 | 125 | y | | 20 | | | |
| x | 1 | 8 | 125 | | | | | | | | | |
| y | | 20 | | | | | | | | | | |
| | | <table border="1"> <tr> <td>x</td> <td>1</td> <td>4</td> <td>10</td> </tr> <tr> <td>y</td> <td></td> <td>32</td> <td>200</td> </tr> </table> | x | 1 | 4 | 10 | y | | 32 | 200 | | |
| x | 1 | 4 | 10 | | | | | | | | | |
| y | | 32 | 200 | | | | | | | | | |
| | | <table border="1"> <tr> <td>x</td> <td>1</td> <td>4</td> <td></td> </tr> <tr> <td>y</td> <td></td> <td>3</td> <td>7.5</td> </tr> </table> | x | 1 | 4 | | y | | 3 | 7.5 | $k = 1.5$ | |
| x | 1 | 4 | | | | | | | | | | |
| y | | 3 | 7.5 | | | | | | | | | |
| | | <table border="1"> <tr> <td>x</td> <td>1</td> <td>4</td> <td></td> </tr> <tr> <td>y</td> <td></td> <td>$\frac{32}{3}$</td> <td>24</td> </tr> </table> | x | 1 | 4 | | y | | $\frac{32}{3}$ | 24 | $k = \frac{2}{3}$ | |
| x | 1 | 4 | | | | | | | | | | |
| y | | $\frac{32}{3}$ | 24 | | | | | | | | | |
| $y \propto x^3$ | | <table border="1"> <tr> <td>x</td> <td>2</td> <td>$\sqrt{5}$</td> <td></td> </tr> <tr> <td>y</td> <td></td> <td>25</td> <td>$27\sqrt{5}$</td> </tr> </table> | x | 2 | $\sqrt{5}$ | | y | | 25 | $27\sqrt{5}$ | | |
| x | 2 | $\sqrt{5}$ | | | | | | | | | | |
| y | | 25 | $27\sqrt{5}$ | | | | | | | | | |
| | | <table border="1"> <tr> <td>x</td> <td>1</td> <td>8</td> <td></td> </tr> <tr> <td>y</td> <td></td> <td>$2a$</td> <td>$4a$</td> </tr> </table> | x | 1 | 8 | | y | | $2a$ | $4a$ | $k = a$ | |
| x | 1 | 8 | | | | | | | | | | |
| y | | $2a$ | $4a$ | | | | | | | | | |