

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></td> <td></td> </tr> </table> | x | 1 | 2 | 10 | y | 3 | | | $k = 3$ | $y = 3x$ | $y = 3 \times 5$ $y = 15$ | $24 = 3 \times x$ $x = 8$ |
| x | 1 | 2 | 10 | | | | | | | | | | | |
| y | 3 | | | | | | | | | | | | | |
| $y \propto x$ | $y = kx$ | <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></td> <td>80</td> </tr> </table> | x | 1 | 2 | 10 | y | 8 | | 80 | | | | $x = 3$ |
| x | 1 | 2 | 10 | | | | | | | | | | | |
| y | 8 | | 80 | | | | | | | | | | | |
| | | <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></td> </tr> </table> | x | 1 | 2 | 10 | y | | | | | $y = 2.5x$ | | $24 = 2.5 \times x$ $x = 9.6$ |
| x | 1 | 2 | 10 | | | | | | | | | | | |
| y | | | | | | | | | | | | | | |
| $y \propto x$ | | <table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>10</td> </tr> <tr> <td>y</td> <td></td> <td>10</td> <td></td> </tr> </table> | x | 1 | 2 | 10 | y | | 10 | | | | | |
| x | 1 | 2 | 10 | | | | | | | | | | | |
| y | | 10 | | | | | | | | | | | | |
| $y \propto x^2$ | $y = kx^2$ | <table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>10</td> </tr> <tr> <td>y</td> <td></td> <td></td> <td>600</td> </tr> </table> | x | 1 | 2 | 10 | y | | | 600 | $k = 6$ | | | $24 = 6 \times x^2$ $x = 2$ |
| x | 1 | 2 | 10 | | | | | | | | | | | |
| y | | | 600 | | | | | | | | | | | |
| $y \propto x^2$ | | <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>150</td> </tr> </table> | x | 1 | 2 | 10 | y | | | 150 | | | | |
| x | 1 | 2 | 10 | | | | | | | | | | | |
| y | | | 150 | | | | | | | | | | | |
| | | <table border="1"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>10</td> </tr> <tr> <td>y</td> <td></td> <td>1</td> <td></td> </tr> </table> | x | 1 | 2 | 10 | y | | 1 | | $k = 0.5$ | | | |
| x | 1 | 2 | 10 | | | | | | | | | | | |
| y | | 1 | | | | | | | | | | | | |