|  |  |
| --- | --- |
| **Fill in the Blanks** | **Inverse Proportion** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **General Statement** | **General Equation** | **Table of Values** | **Value** **of** $k$ | **Specific****Equation**  | **When** $x=6,$$$ y=?$$ | **When** $y=10, x=?$ |
| $$y∝\frac{1}{x}$$ | $$y=\frac{k}{x}$$ |

|  |  |  |  |
| --- | --- | --- | --- |
| $$x$$ | $$1$$ | $$4$$ | $$8$$ |
| $$y$$ | $$48$$ |  |  |

 | $$k=48$$ | $$y=\frac{48}{x}$$ | $$y=\frac{48}{6}=8$$ | $$x=\frac{48}{10}=4.8$$ |
| $$y∝\frac{1}{x}$$ | $$y=\frac{k}{x}$$ |

|  |  |  |  |
| --- | --- | --- | --- |
| $$x$$ | $$1$$ | $$2$$ | $$5$$ |
| $$y$$ | $$120$$ |  | $$24$$ |

 |  |  |  | $$x=\frac{120}{10}=12$$ |
|  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| $$x$$ | $$1$$ | $$5$$ | $$10$$ |
| $$y$$ |  |  |  |

 |  | $$y=\frac{30}{x}$$ |  | $$x=\frac{30}{10}=3$$ |
| $$y∝\frac{1}{x}$$ |  |

|  |  |  |  |
| --- | --- | --- | --- |
| $$x$$ | $$5$$ | $$20$$ | $$100$$ |
| $$y$$ |  | $$30$$ |  |

 |  |  |  |  |
| $$y∝\frac{1}{x^{2}}$$ | $$y=\frac{k}{x^{2}}$$ |

|  |  |  |  |
| --- | --- | --- | --- |
| $$x$$ | $$1$$ | $$2$$ | $$3$$ |
| $$y$$ |  |  | $$40$$ |

 | $$k=360$$ |  |  | $$x=\sqrt{\frac{360}{10}}=6$$ |
| $$y∝\frac{1}{x^{2}}$$ |  |

|  |  |  |  |
| --- | --- | --- | --- |
| $$x$$ | $$1$$ | $$2$$ | $$10$$ |
| $$y$$ |  |  | $$3$$ |

 |  |  |  |  |
|  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| $$x$$ | $$1$$ | $$5$$ | $$10$$ |
| $$y$$ |  | $$4$$ |  |

 | $$k=20$$ |  |  |  |