Fill In The Blanks…

**Inverse Functions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| $$f(x)$$ | **Write as** $$y=…$$ | **Swap** $x$**and** $y$ | **Make** $y$ **the subject** | **Write as** $f^{-1}\left(x\right)=…$ |
| $$f\left(x\right)=3x-1$$ | $$y=3x-1$$ | $$x=3y-1$$ | $x+1=3y$  | $$\frac{x+1}{3}=y$$ | $$f^{-1}\left(x\right)=\frac{x+1}{3}$$ |
| $$f\left(x\right)=2x+5$$ |  |  |  |  |  |
| $$f\left(x\right)=x^{2}+8$$ |  |  |  |  |  |
| $$f\left(x\right)=\sqrt{x-3}$$ | $$y=\sqrt{x-3}$$ | $$x=\sqrt{y-3}$$ | $$x^{2}=y-3$$ |  |  |
| $$f\left(x\right)=\frac{x+2}{7}$$ |  |  |  |  |  |
| $$f\left(x\right)=\frac{x}{3}-5$$ |  |  |  |  |  |
| $$f\left(x\right)=\frac{9}{x}$$ |  |  |  |  |  |
| $$f\left(x\right)=\frac{4}{x+3}$$ |  |  |  |  |  |