Find a continuous function for each domain-range combination.

Domain / Range	$x \in \mathbb{R}$	$x \in \mathbb{R}, x > 0$	$x \in \mathbb{R}, x \geq 0$
$y \in \mathbb{R}$			
$y \in \mathbb{R}, y > 0$		$\mathrm{f}(x) = \frac{1}{\sqrt{x}}$	
$y \in \mathbb{R}, y \geq 0$	$\mathrm{f}(x) = x^2$		

When the domain is given as $\{x \in \mathbb{R}; x > 0\}$, for the purposes of this activity this means that it isn't possible to enter 0 or any negative number; it does not mean that you can choose to restrict the domain in this way. Similarly a range of $\{y \in \mathbb{R}; y \geq 0\}$ means that every non-negative number is attainable. Piecewise functions such as $f(x) = \begin{cases} 1 & x = 0 \\ \frac{1}{x} & x > 0 \end{cases}$ are not allowed!