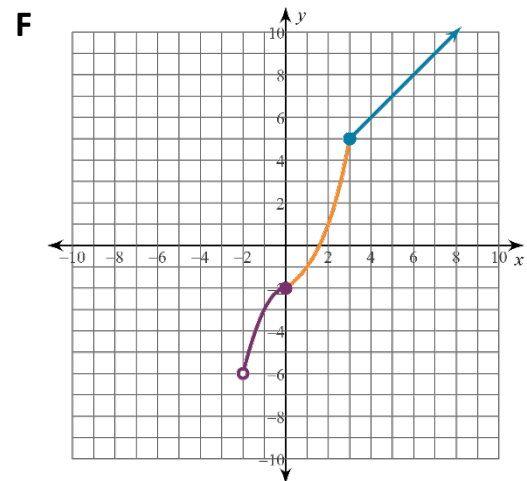
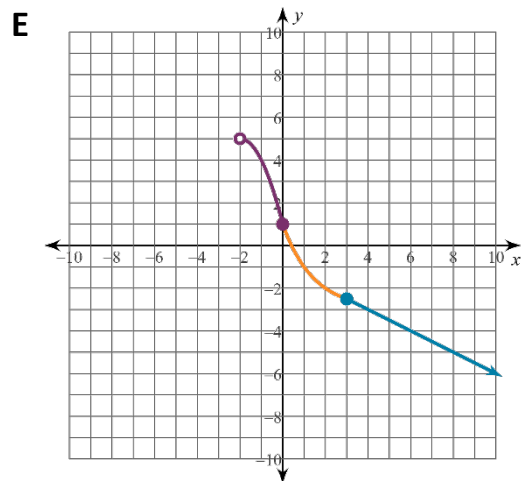
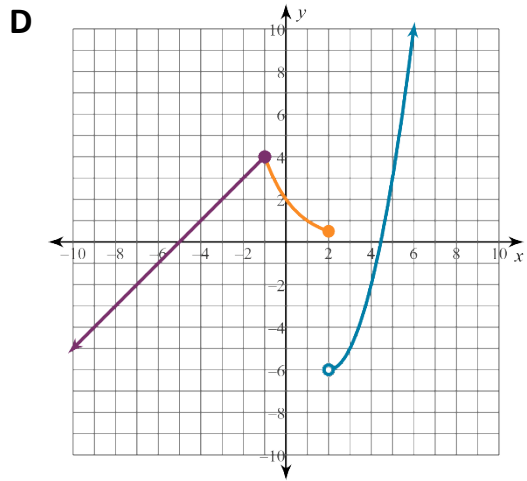
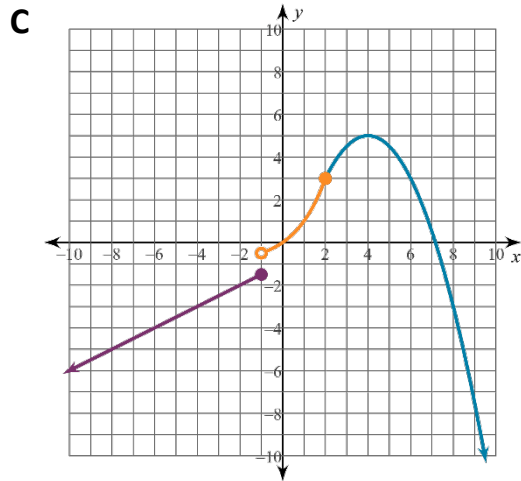
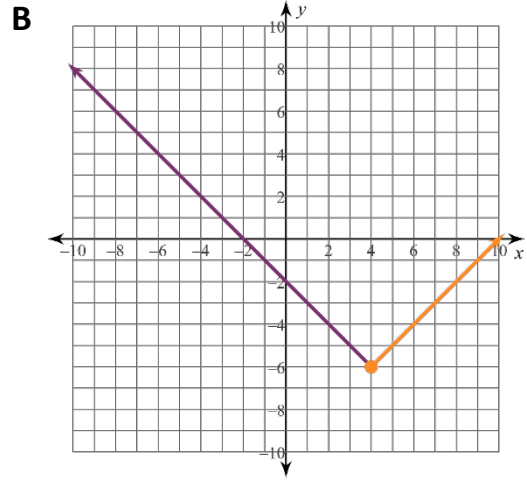
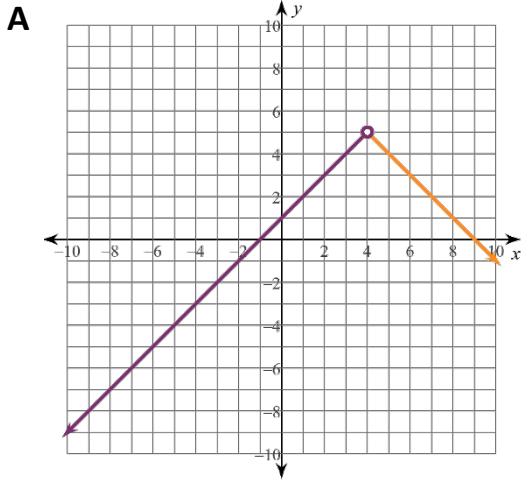


# CARD MATCHING – GRAPH



## CARD MATCHING – DOMAIN/RANGE

<p><b>1</b></p> <p><b>Domain</b> <math>\{x   x \in \mathbb{R}\}</math></p> <p><b>Range</b> <math>\{y   y \in \mathbb{R}\}</math></p>	<p><b>2</b></p> <p><b>Domain</b> <math>\{x   x \in \mathbb{R}\}</math></p> <p><b>Range</b> <math>\{y   y \in \mathbb{R}, y \leq 5\}</math></p>
<p><b>3</b></p> <p><b>Domain</b> <math>\{x   x \in \mathbb{R}, x &gt; -2\}</math></p> <p><b>Range</b> <math>\{y   y \in \mathbb{R}, y &gt; -6\}</math></p>	<p><b>4</b></p> <p><b>Domain</b> <math>\{x   x \in \mathbb{R}\}</math></p> <p><b>Range</b> <math>\{y   y \in \mathbb{R}, y &lt; 5\}</math></p>
<p><b>5</b></p> <p><b>Domain</b> <math>\{x   x \in \mathbb{R}, x &gt; -2\}</math></p> <p><b>Range</b> <math>\{y   y \in \mathbb{R}, y &lt; 5\}</math></p>	<p><b>6</b></p> <p><b>Domain</b> <math>\{x   x \in \mathbb{R}\}</math></p> <p><b>Range</b> <math>\{y   y \in \mathbb{R}, y \geq -6\}</math></p>

## CARD MATCHING – INCREASING/DECREASING

<p><b>G</b></p> <p><b>Increasing</b> <math>(-\infty, 4)</math></p> <p><b>Decreasing</b> <math>(4, \infty)</math></p>	<p><b>H</b></p> <p><b>Increasing</b> <math>(-\infty, 4]</math></p> <p><b>Decreasing</b> <math>[4, \infty)</math></p>
<p><b>J</b></p> <p><b>Increasing</b> <math>(-2, \infty)</math></p> <p><b>Decreasing</b> <i>never</i></p>	<p><b>K</b></p> <p><b>Increasing</b> <math>[4, \infty)</math></p> <p><b>Decreasing</b> <math>(-\infty, 4]</math></p>
<p><b>L</b></p> <p><b>Increasing</b> <math>(-\infty, -1] \cup (2, \infty)</math></p> <p><b>Decreasing</b> <math>[-1, 2]</math></p>	<p><b>M</b></p> <p><b>Increasing</b> <i>never</i></p> <p><b>Decreasing</b> <math>(-2, \infty)</math></p>

## CARD MATCHING – EQUATION

**7**

$$f(x) = \begin{cases} -(x+2)^2 + 5 & \text{if } -2 < x \leq 0 \\ \left(\frac{1}{2}\right)^{x-2} - 3 & \text{if } 0 < x < 3 \\ -\frac{1}{2}x - 1 & \text{if } x \geq 3 \end{cases}$$

**8**

$$g(x) = \begin{cases} x+5 & \text{if } x \leq -1 \\ \left(\frac{1}{2}\right)^{x-1} & \text{if } -1 < x \leq 2 \\ (x-2)^2 - 6 & \text{if } x > 2 \end{cases}$$

**9**

$$h(x) = \begin{cases} -x^2 - 2 & \text{if } -2 < x \leq 0 \\ 2^x - 3 & \text{if } 0 < x < 3 \\ x+2 & \text{if } x \geq 3 \end{cases}$$

**10**

$$k(x) = \begin{cases} x+1 & \text{if } x < 4 \\ -x+9 & \text{if } x > 4 \end{cases}$$

**11**

$$v(x) = \begin{cases} \frac{1}{2}x - 1 & \text{if } x \leq -1 \\ 2^x - 1 & \text{if } -1 < x \leq 2 \\ -\frac{1}{2}(x-4)^2 + 5 & \text{if } x > 2 \end{cases}$$

**12**

$$w(x) = \begin{cases} -x - 2 & \text{if } x < 4 \\ x - 10 & \text{if } x \geq 4 \end{cases}$$