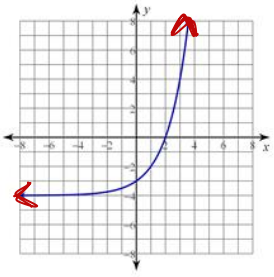
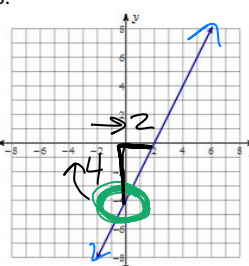
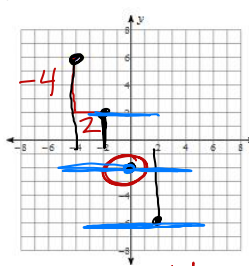


<p>1.</p>  <p style="color: red; font-style: italic;">go on forever</p>	<p>Circle One: Linear <u>Exponential</u> Neither</p> <p>Circle One: Discrete <u>Continuous</u></p> <p>Domain? <u>x-values</u> $(-\infty, \infty)$ Interval $-\infty < x < \infty$ Inequality</p>										
<p>2.</p> <p style="text-align: center;"><u>$y = 2x + 4$</u></p> <p style="font-size: 2em; text-align: center;">Function</p>	<p>Circle One: <u>Linear</u> Exponential Neither</p> <p>Circle One: Discrete <u>Continuous</u></p> <p>Domain? $(-\infty, \infty)$ $-\infty < x < \infty$</p>										
<p>3.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>5</td> </tr> <tr> <td>2</td> <td>11</td> </tr> <tr> <td>4</td> <td>17</td> </tr> <tr> <td>6</td> <td>23</td> </tr> </tbody> </table> <p style="margin-left: 100px;">+2 +6 +2 +6 +2 +6</p> <p style="margin-left: 300px;">$\frac{6}{2} = 3$</p> <p>Equation: <u>$y = 5 + 3x$</u></p>	x	y	0	5	2	11	4	17	6	23	<p>Circle One: <u>Linear</u> Exponential Neither</p> <p>Circle One: <u>Discrete</u> Continuous</p> <p>Domain? <u>set notation</u> $\{0, 2, 4, 6\}$ Range $\{5, 11, 17, 23\}$</p>
x	y										
0	5										
2	11										
4	17										
6	23										
<p>4. You invest <u>\$4,000</u> in a company and earn a <u>5% profit</u> at the end of each year.</p> <p style="color: green; font-style: italic;">one time a yr</p> <p>$100 + 5 = 105/100$</p> <p>Equation: <u>$4000(1.05)^x$</u></p> <p>$4000(1.05)^{30} \rightarrow \\17287.77</p>	<p>Circle One: Linear <u>Exponential</u> Neither</p> <p>Circle One: <u>Discrete</u> Continuous</p> <p>Domain? yrs $[0, 1, 2, 3 \dots \infty)$</p> <p>Range: \$ (Profit) $[4000, \infty)$</p>										
<p>5. Joe has a jar of <u>300 Reece's pieces</u>. Every hour he reaches in the jar and gets ten pieces and eats them quickly.</p> <p style="text-align: center;"><u>-10</u></p> <p>Equation: <u>$y = 300 - 10x$</u></p>	<p>Circle One: <u>Linear</u> Exponential Neither</p> <p>Circle One: <u>Discrete</u> Continuous</p> <p>Domain? Hours $[0, 1, 2 \dots 30]$ $\{0, 1, \dots, 30\}$</p>										

Range: Pieces Candy
 $[0, 10, \dots, 300]$
 $\{0, 10, \dots, 300\}$

Warmup

- 1) You are driving a race car. Each hour you gain 10 miles. You are driving for 9 hours. Linear or exponential? Discrete or continuous? Write out the domain and range in all forms you know.
- 2) Mrs. Forrester is so excited to see her 7th period every day. Each day she sees them, her excitement level increases by 2.5%. Her level starts at 6%. Linear or exponential? Discrete or continuous? Write out the domain and range in all forms you know?

<p>6.</p> <table border="1" style="display: inline-table; margin-right: 20px;"> <thead> <tr><th>x</th><th>y</th></tr> </thead> <tbody> <tr><td>0</td><td>4</td></tr> <tr><td>1</td><td>12</td></tr> <tr><td>2</td><td>36</td></tr> <tr><td>3</td><td>108</td></tr> </tbody> </table> <p style="margin-left: 20px;"> $\begin{matrix} \rightarrow \times 3 \\ \rightarrow \times 3 \\ \rightarrow \times 3 \end{matrix}$ </p> <p>Equation: $y = 4(3)^x$ $y = 12(3)^{x-1}$</p>	x	y	0	4	1	12	2	36	3	108	<p>Circle One: Linear <u>Exponential</u> Neither</p> <p>Circle One: <u>Discrete</u> Continuous</p> <p>Domain? $\{0, 1, 2, 3\}$ <u>Range</u> $\{4, 12, 36, 108\}$</p>
x	y										
0	4										
1	12										
2	36										
3	108										
<p>7.</p> <table border="1" style="display: inline-table; margin-right: 20px;"> <thead> <tr><th>Cashiers</th><th>Items scanned</th></tr> </thead> <tbody> <tr><td>1</td><td>20</td></tr> <tr><td>2</td><td>40</td></tr> <tr><td>3</td><td>60</td></tr> <tr><td>4</td><td>80</td></tr> </tbody> </table> <p style="margin-left: 20px;"> $\begin{matrix} \rightarrow +20 \\ \rightarrow +20 \\ \rightarrow +20 \end{matrix}$ </p> <p>Equation: $y = 20x$</p>	Cashiers	Items scanned	1	20	2	40	3	60	4	80	<p>Circle One: <u>Linear</u> Exponential Neither</p> <p>Circle One: <u>Discrete</u> Continuous</p> <p>Domain? <u>Cashiers</u> $\{1, 2, 3, 4\}$ <u>Range</u> <u>Items scanned</u> $\{20, 40, 60, 80\}$</p>
Cashiers	Items scanned										
1	20										
2	40										
3	60										
4	80										
<p>8.</p>  <p style="margin-left: 20px;"> <u>4 eva</u> $\frac{4}{2} = 2$ slope $y = mx + b$ </p> <p>Equation: $y = 2x - 4$ (hint: make a table from the points on the graph)</p>	<p>Circle One: <u>Linear</u> Exponential Neither</p> <p>Circle One: Discrete <u>Continuous</u></p> <p>Domain? $(-\infty, \infty)$ <u>Range</u> $(-\infty, \infty)$ $-\infty < x < \infty$ $-\infty < y < \infty$</p>										
<p>9.</p>  <p style="margin-left: 20px;"> $-\frac{4}{2} = -2$ slope <u>0 term</u> -2 </p> <p>Equation: $y = -2 - 2x$ (hint: make a table from the points on the graph)</p>	<p>Circle One: <u>Linear</u> Exponential Neither</p> <p>Circle One: <u>Discrete</u> Continuous</p> <p>Domain? $\{-4, -2, 0, 2\}$ <u>Range</u> $\{-6, -2, 2, 6\}$</p>										
<p>10.</p> <table border="1" style="display: inline-table; margin-right: 20px;"> <thead> <tr><th>Year</th><th>Profit</th></tr> </thead> <tbody> <tr><td>0</td><td>100</td></tr> <tr><td>1</td><td>200</td></tr> <tr><td>2</td><td>400</td></tr> <tr><td>3</td><td>800</td></tr> </tbody> </table> <p style="margin-left: 20px;"> $\begin{matrix} \rightarrow \times 2 \\ \rightarrow \times 2 \\ \rightarrow \times 2 \end{matrix}$ </p> <p>Equation: $y = 200(2)^x$ $y = 100(2)^{x-1}$</p>	Year	Profit	0	100	1	200	2	400	3	800	<p>Circle One: Linear <u>Exponential</u> Neither</p> <p>Circle One: <u>Discrete</u> Continuous</p> <p>Domain? yrs $\{0, 1, 2, 3\}$ <u>Range</u> <u>\$(Profit)</u> $\{100, 200, 400, 800\}$</p>
Year	Profit										
0	100										
1	200										
2	400										
3	800										