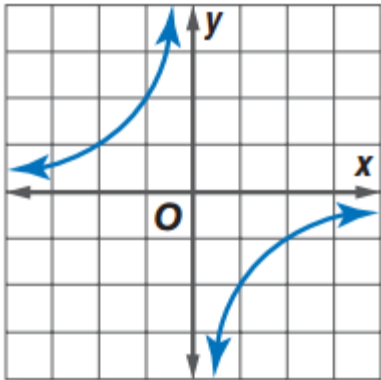
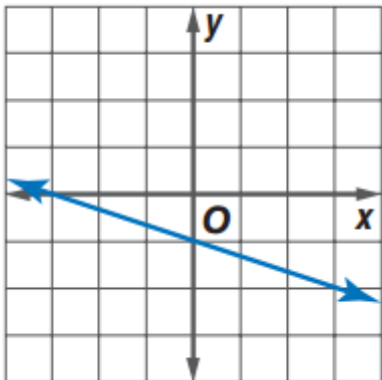
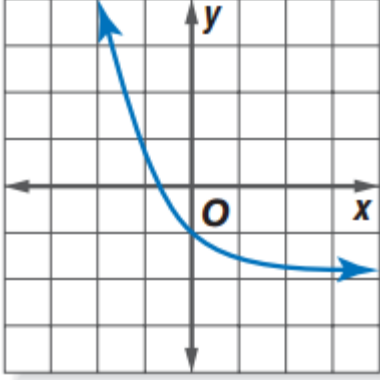


Lesson 4-3ab Homework Practice: *Linear/Nonlinear Functions*

Determine if the functions below are linear or nonlinear. **EXPLAIN**

<p>#1)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr><td style="background-color: #FFD700;">x</td><td>3</td><td>6</td><td>9</td><td>12</td></tr> <tr><td style="background-color: #FFD700;">y</td><td>12</td><td>10</td><td>8</td><td>6</td></tr> </table>	x	3	6	9	12	y	12	10	8	6	<p>#2)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr><td style="background-color: #FFD700;">x</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> <tr><td style="background-color: #FFD700;">y</td><td>1</td><td>4</td><td>9</td><td>16</td></tr> </table>	x	1	2	3	4	y	1	4	9	16	<p>#3)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr><td style="background-color: #FFD700;">x</td><td>5</td><td>10</td><td>15</td><td>20</td></tr> <tr><td style="background-color: #FFD700;">y</td><td>13</td><td>28</td><td>43</td><td>58</td></tr> </table>	x	5	10	15	20	y	13	28	43	58
x	3	6	9	12																												
y	12	10	8	6																												
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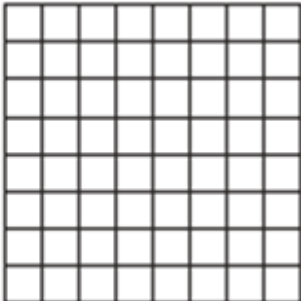
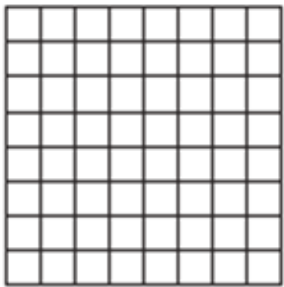
<p>#4)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr><td style="background-color: #FFD700;">x</td><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td style="background-color: #FFD700;">y</td><td>-2</td><td>-18</td><td>-50</td><td>-98</td></tr> </table>	x	1	3	5	7	y	-2	-18	-50	-98	<p>#5)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr><td style="background-color: #FFD700;">x</td><td>2</td><td>4</td><td>6</td><td>8</td></tr> <tr><td style="background-color: #FFD700;">y</td><td>10</td><td>12</td><td>16</td><td>24</td></tr> </table>	x	2	4	6	8	y	10	12	16	24	<p>#6)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr><td style="background-color: #FFD700;">x</td><td>4</td><td>8</td><td>12</td><td>16</td></tr> <tr><td style="background-color: #FFD700;">y</td><td>3</td><td>0</td><td>-3</td><td>-6</td></tr> </table>	x	4	8	12	16	y	3	0	-3	-6
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x	4	8	12	16																												
y	3	0	-3	-6																												

<p>#7)</p> 	<p>#8.)</p> 	<p>#9)</p> 
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<p>10.) $y = \frac{3}{4}x + 1$</p>	<p>11.) $xy = 10$</p>	<p>12.) $y = x^2 + 3$</p>
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13.) **Which One Doesn't Belong?** Identify the function that is not linear. Explain your reasoning.

$y = 3x + 5$	$y = 5x^3$	$y + 3 = 5x$	$3x - y = 5$
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<p>14.)</p> <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr><td>x</td><td>y</td></tr> <tr><td>2</td><td>1</td></tr> <tr><td>3</td><td>3</td></tr> <tr><td>4</td><td>5</td></tr> <tr><td>5</td><td>7</td></tr> </table> 	x	y	2	1	3	3	4	5	5	7	<p>15.)</p> <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr><td>x</td><td>y</td></tr> <tr><td>1</td><td>4</td></tr> <tr><td>2</td><td>1</td></tr> <tr><td>3</td><td>0</td></tr> <tr><td>4</td><td>1</td></tr> </table> 	x	y	1	4	2	1	3	0	4	1
x	y																				
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NAME _____ DATE _____ PERIOD _____