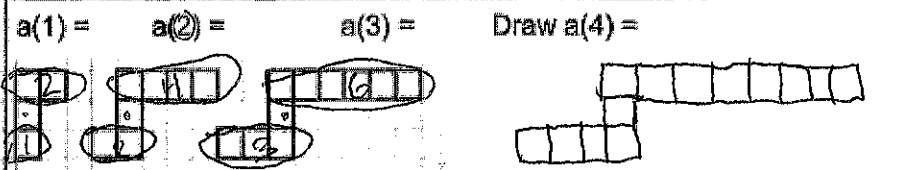

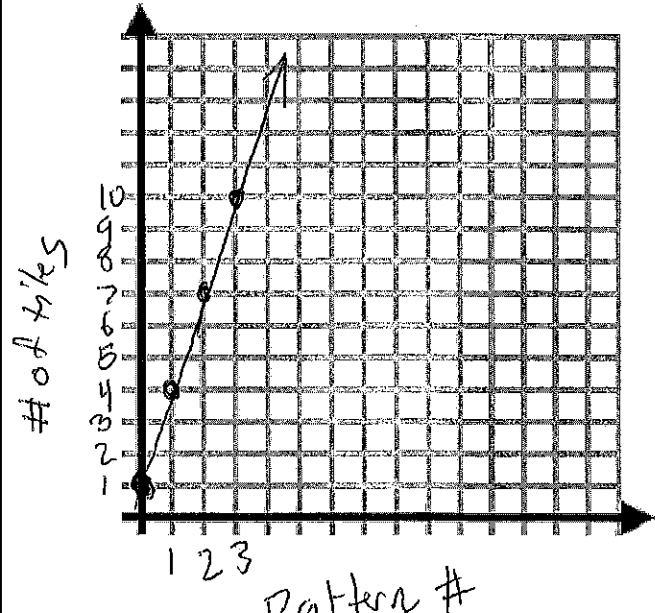
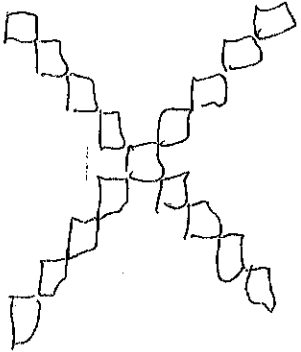
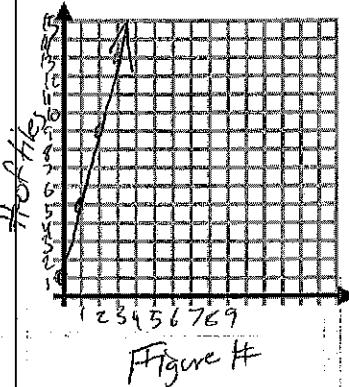
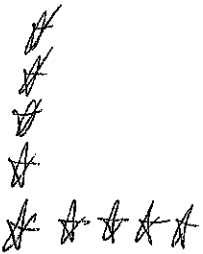
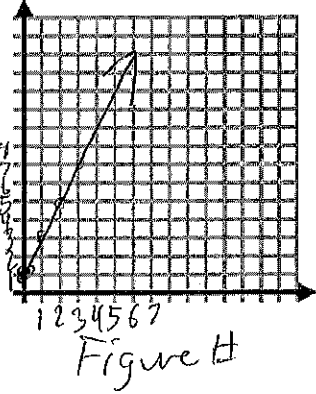
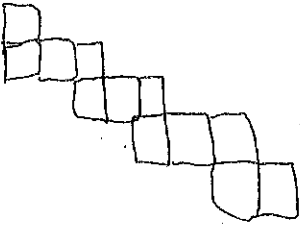
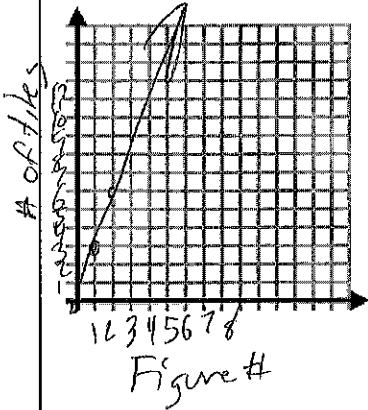


Day 21: Investigate Linear Pattern

Complete Pattern a(x)	Complete Table																				
<p>x is the input, which is the <u>figure #</u> for the pattern</p> <p>a(1) = a(2) = a(3) = Draw a(4) =</p>  <p>Sketch a(20) =</p> 	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Figure #</th> <th style="width: 80%;">Output (Square Units)</th> </tr> </thead> <tbody> <tr><td>0</td><td>1</td></tr> <tr><td>1</td><td>4</td></tr> <tr><td>2</td><td>7 $+3$</td></tr> <tr><td>3</td><td>10 $+3$</td></tr> <tr><td>4</td><td>13 $+3$</td></tr> <tr><td>5</td><td>16</td></tr> <tr><td>20</td><td>61</td></tr> <tr><td>21.5</td><td>65.5</td></tr> <tr><td>x</td><td>$3x + 1$</td></tr> </tbody> </table> <p style="text-align: center;">$x + 2x + 1$</p>	Figure #	Output (Square Units)	0	1	1	4	2	7 $+3$	3	10 $+3$	4	13 $+3$	5	16	20	61	21.5	65.5	x	$3x + 1$
Figure #	Output (Square Units)																				
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1	4																				
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20	61																				
21.5	65.5																				
x	$3x + 1$																				

Write an Equation	Graph
<p>x: pattern # y: # of tiles</p> <p>Equation:</p> $y = x + 2x + 1$ $y = 3x + 1$	

Pattern	Draw the 4th figure	Complete Table	Write an Equation	Graph																				
b(x)		<table border="1"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr><td>0</td><td>1</td></tr> <tr><td>1</td><td>5</td></tr> <tr><td>2</td><td>9</td></tr> <tr><td>3</td><td>13</td></tr> <tr><td>4</td><td>17</td></tr> <tr><td>5</td><td>21</td></tr> <tr><td>20</td><td>81</td></tr> <tr><td>21.5</td><td>87</td></tr> <tr><td>x</td><td>$4x+1$</td></tr> </tbody> </table>	x	y	0	1	1	5	2	9	3	13	4	17	5	21	20	81	21.5	87	x	$4x+1$	<p>x: Figure #</p> <p>y: # of tiles</p> <p>Equation: $y = 4x + 1$</p>	
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1	5																							
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c(x)		<table border="1"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr><td>0</td><td>1</td></tr> <tr><td>1</td><td>3</td></tr> <tr><td>2</td><td>5</td></tr> <tr><td>3</td><td>7</td></tr> <tr><td>4</td><td>9</td></tr> <tr><td>5</td><td>11</td></tr> <tr><td>20</td><td>41</td></tr> <tr><td>21.5</td><td>44</td></tr> <tr><td>x</td><td>$2x+1$</td></tr> </tbody> </table>	x	y	0	1	1	3	2	5	3	7	4	9	5	11	20	41	21.5	44	x	$2x+1$	<p>x: Figure #</p> <p>y: # of tiles</p> <p>Equation: $y = 2x + 1$</p>	
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d(x)		<table border="1"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr><td>0</td><td>0</td></tr> <tr><td>1</td><td>3</td></tr> <tr><td>2</td><td>6</td></tr> <tr><td>3</td><td>9</td></tr> <tr><td>4</td><td>12</td></tr> <tr><td>5</td><td>15</td></tr> <tr><td>20</td><td>60</td></tr> <tr><td>21.5</td><td>64.5</td></tr> <tr><td>x</td><td>$3x$</td></tr> </tbody> </table>	x	y	0	0	1	3	2	6	3	9	4	12	5	15	20	60	21.5	64.5	x	$3x$	<p>x: Figure #</p> <p>y: # of tiles</p> <p>Equation: $y = 3x$</p>	
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