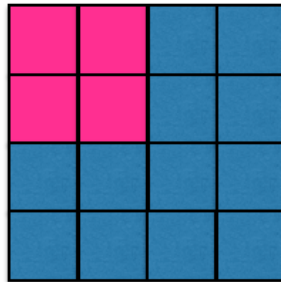




# DIFFERENCE OF TWO SQUARES NOTES

Students are not limited to finding the difference between consecutive squares. See below:



$$16 - 4 = 12$$

The table below shows all the possible differences of two squares that can be made with square numbers from 1 to 100 (those made from square numbers from 1 to 36 are in bold).

What patterns can students spot in the numbers that are made?

	<b>1</b>	<b>4</b>	<b>9</b>	<b>16</b>	<b>25</b>	<b>36</b>	<b>49</b>	<b>64</b>	<b>81</b>	<b>100</b>
<b>1</b>										
<b>4</b>	<b>3</b>									
<b>9</b>	<b>8</b>	<b>5</b>								
<b>16</b>	<b>15</b>	<b>12</b>	<b>7</b>							
<b>25</b>	<b>24</b>	<b>21</b>	<b>16</b>	<b>9</b>						
<b>36</b>	<b>35</b>	<b>32</b>	<b>27</b>	<b>20</b>	<b>11</b>					
<b>49</b>	48	45	40	33	24	13				
<b>64</b>	63	60	55	48	39	28	15			
<b>81</b>	80	77	72	65	56	45	32	17		
<b>100</b>	99	96	91	84	75	64	51	36	19	

Can your students now construct any of the proofs that Matt and James do in the video?