MAFS.4.OA.3.5 Number 1

1. Bullet 2: 26
   Bullet 4: 29
2. Bullet 3: 3, 4, 6, 10, 18
3.

Numbers in the pattern
49
25
13
7

4. Multiply by 2 and add 10
5. The triangles are in rows to create a larger triangle. The first triangle is a single triangle. The second triangle adds a row of 3 for a total of 4 triangles. The third adds another row of 5 triangles and a total of 9 triangles. The fourth triangle has a row of 7 added for a total of 16 triangles. Each triangle adds a row that is 2 triangles longer than the triangle before and the rows model consecutive odd numbers 1, 3, 5, 7, and etc. +

Student explanations may vary.

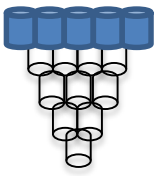
MAFS.4.OA.3.5 Number 2

1.

	40	39	35
7, 14, 21, 28, ___			X
75, 66, 57, 48 ___		X	
12, 19, 26, 33, ___	X		

2. Bullet 3: 5, 18, 44, 96, 200
3.

Numbers in the pattern
8
18
48
138

4. Divide by 2 and add 10
5. 

MAFS.4.OA.3.5 Number 3

1. Bullet 3: 16
   Bullet 4:4

2. Bullet 2: 4, 8, 16, 32, 64

3.

Numbers in the pattern
100
25
10
7

4. Multiply by 2 and add 5

5. Figure 1 has 3 squares (2 on the base and 1 on top). Figure 2 has 6 squares (3 on the bottom, 2 on the next level and 1 on top). Figure 3 has 10 squares (4 on the bottom, 3 on the next level, 2 on the next level and 1 on top). Figure 4 has 15 squares (5 on the bottom, 4 on the next level up, 3 on the next level up, 2 on the next level up, and 1 on top.) If the pattern were to continue, there would be 21 squares (6 on the bottom, 5 on the next level, 4 on the next level, 3 on the next level, 2 on the next level, and 1 on top).

MAFS.4.OA.3.5 Number 4

1

	42	**77**	**34**
14, 19, 24, 29, ___	X		
12, 14, 18, 26, ___			X
2, 7, 17, 37, ___		X	

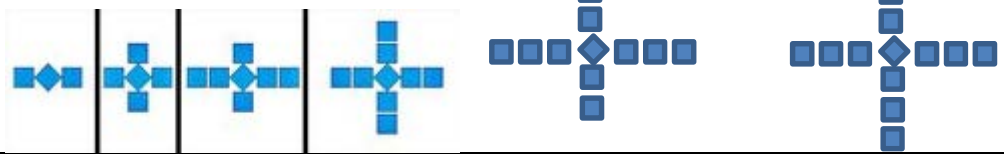
2. Bullet 1: 7, 20, 46, 98, 200

3.

Numbers in the pattern
10
20
40
80

4. Subtract 20 and add 2

5.



MAFS.4.OA.3.5 Number 5

1. Bullet 1: 3

2. Bullet 4: 6, 16, 36, 76, 156

3.

Numbers in the pattern
72
40
24
16

4. Multiply by 3 and add 10

5. The first image has 1 center square and 1 square attached to each vertex of the center square for a total of 5 squares. (1 = 5) The second image has 1 center square and 2 squares attached to each vertex of the center square for a total of 7 squares (2 = 7) The third images adds another 4 squares – 1 per vertex. (3 = 13). The fourth image adds another 4 for a total of 17 squares. The relationship is that each image adds a set of 4 squares to each of the four sides. Answers will vary.