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Math worksheet on *'Patterning - First Values from Equation for Geometric Pattern (Level 1)'*. Part of a broader unit on *'Patterns and Sums - Intro'*

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1

Choose the first values that this equation would create starting with n=1

$$a_n = 2 \times 3^{n-1}$$

a	2, -1, -4, -7, -10, -13	**b**	2, 2, 2, 2, 2, 2
c	2, 6, 18, 54, 162, 486	**d**	-2, -6, -18, -54, -162, -486
e	2, 4, 8, 16, 32, 64	**f**	2, 8, 32, 128, 512, 2,048

2

Choose the first values that this equation would create starting with n=1

$$a_n = 1 \times 2^{n-1}$$

a	1, 6, 36, 216, 1,296, 7,776	**b**	1, -2, 4, -8, 16, -32
c	1, -1, -3, -5, -7, -9	**d**	1, 2, 4, 8, 16, 32
e	0, 0, 0, 0, 0, 0	**f**	1, 3, 5, 7, 9, 11

3

Choose the first values that this equation would create starting with n=1

$$a_n = 1 \times 5^{n-1}$$

a	1, 6, 11, 16	**b**	1, -4, -9, -14
c	1, 6, 7, 13	**d**	-2, -10, -50, -250
e	1, 6, 36, 216	**f**	1, 5, 25, 125

4

Choose the first values that this equation would create starting with n=1

$$a_n = 3 \times 3^{n-1}$$

a	3, 0, 0, 0, 0, 0	**b**	3, 9, 27, 81, 243, 729
c	3, 0, -3, -6, -9, -12	**d**	3, 18, 108, 648, 3,888, 23,328
e	3, 12, 48, 192, 768, 3,072	**f**	3, 6, 9, 12, 15, 18

5

Choose the first values that this equation would create starting with n=1

$$a_n = 3 \times 2^{n-1}$$

a	3, 6, 12, 24, 48, 96	**b**	3, 1, -1, -3, -5, -7
c	3, 5, 7, 9, 11, 13	**d**	6, 12, 24, 48, 96, 192
e	3, 0, 0, 0, 0, 0	**f**	3, 5, 8, 13, 21, 34

6

Choose the first values that this equation would create starting with n=1

$$a_n = 2 \times 4^{n-1}$$

a	2, -2, -6, -10	**b**	2, 6, 18, 54
c	2, 8, 32, 128	**d**	2, 6, 10, 14
e	-2, -8, -32, -128	**f**	2, 0, 0, 0

7

Choose the first values that this equation would create starting with n=1

$$a_n = 3 \times 4^{n-1}$$

a	7, 28, 112, 448	**b**	3, 12, 48, 192
c	3, 6, 12, 24	**d**	3, -1, -5, -9
e	4, 16, 64, 256	**f**	3, 7, 10, 17