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

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1

Find the correct equation to describe this geometric pattern where n=1 is the first term

1, 2, 4, 8, 16, 32

a $a_n = a_{n-2} + a_{n-1}$	**b** $a_n = 1 \times 6^{n-1}$
c $a_n = 1 - 2(n-1)$	**d** $a_n = 1 \times 2^{n-1}$
e $a_n = 1 \times 2^n$	**f** $a_n = 1 \times -2^{n-1}$

2

1, 3, 9, 27, 81, 243

Find the correct equation to describe this geometric pattern where n=1 is the first term

a	$a_n = 5 \times 3^{n-1}$
b	$a_n = 1 \times 3^{n-1}$
c	$a_n = 1 \times 3^n$
d	$a_n = 1 + 3(n-1)$
e	$a_n = -2 \times 3^{n-1}$
f	$a_n = a_{n-2} + a_{n-1}$

3

2, 4, 8, 16, 32, 64

Find the correct equation to describe this geometric pattern where n=1 is the first term

a	$a_n = 2 \times 2^n$
b	$a_n = 2 \times 2^{n-1}$
c	$a_n = 2 \times -2^{n-1}$
d	$a_n = 2 - 2(n-1)$
e	$a_n = a_{n-2} + a_{n-1}$
f	$a_n = 2 + 2(n-1)$

4

Find the correct equation to describe this geometric pattern where n=1 is the first term

3, 12, 48, 192

a $a_n = 3 \times 4^n$	**b** $a_n = 6 \times 4^{n-1}$
c $a_n = a_{n-2} + a_{n-1}$	**d** $a_n = 3 \times 4^{n-1}$
e $a_n = 3 \times 1^{n-1}$	**f** $a_n = 3 - 4(n-1)$

5

3, 6, 12, 24, 48, 96

Find the correct equation to describe this geometric pattern where n=1 is the first term

a	$a_n = 3 \times 2^{n-1}$
b	$a_n = a_{n-2} + a_{n-1}$
c	$a_n = 2 \times 2^{n-1}$
d	$a_n = 3 \times -2^{n-1}$
e	$a_n = -1 \times 2^{n-1}$
f	$a_n = 3 + 2(n-1)$

6

3, 9, 27, 81, 243, 729

Find the correct equation to describe this geometric pattern where n=1 is the first term

a	$a_n = 3 \times 3^n$
b	$a_n = 3 \times 0^{n-1}$
c	$a_n = 6 \times 3^{n-1}$
d	$a_n = a_{n-2} + a_{n-1}$
e	$a_n = 3 \times -1^{n-1}$
f	$a_n = 3 \times 3^{n-1}$

7

Find the correct equation to describe this geometric pattern where n=1 is the first term

1, 5, 25, 125

a $a_n = -3 \times 5^{n-1}$	**b** $a_n = 1 \times 5^{n-1}$
c $a_n = a_{n-2} + a_{n-1}$	**d** $a_n = 1 \times 5^n$
e $a_n = 1 + 5(n-1)$	**f** $a_n = 1 - 5(n-1)$