

## mobius

## Patterning - Equation for Geometric Pattern



<b>1</b> 2, 4, 8, 16, 32, 64	Find the correct equation to describe this geometric pattern where n=1 is the first term	<b>2</b> 1, 3, 9, 27, 81, 243	Find the correct equation to describe this geometric pattern where n=1 is the first term
	$A \qquad \qquad a_n = 2 \times 2^n$		${\sf A} \qquad a_n = {\sf 1} + {\sf 3}(n-1)$
	$B \qquad  a_n = 2 \times 2^{n-1}$		$oxed{B} \qquad a_n = 1  imes 3^n$
	$C \qquad a_n = 2 + 2(n - 1)$		$oxed{C} \qquad a_n = a_{n ext{-}2} + a_{n ext{-}1}$
	$D \qquad \   a_n = a_{n2} + a_{n1}$		$D \qquad \qquad a_n = 1  imes 3^{n-1}$
	$E \qquad  a_n = 2 \times -2^{n-1}$		$E \qquad  a_n = -2 \times 3^{n-1}$
	$F \qquad a_n = 2 - 2(n - 1)$		${\sf F} \qquad  a_n = {\sf 5} \times {\sf 3}^{n-1}$
Find the correct equation to describe this geometric pattern where n=1 is the first term	1, 2, 4, 8, 16, 32	Find the correct equation to describe this geometric pattern where n=1 is the first term	3, 15, 75, 375
$^{A}  a_n = 1 \times 2^{n-1}$	$egin{array}{ccc} B & a_n = 1  imes 6^{n-1} \end{array}$	$Aa_n=3-5(n-1)$	$egin{array}{ccc} B & a_n = 2  imes 5^{n-1} \end{array}$
$^{ extsf{c}}a_n=a_{n-2}+a_{n-1}$	$oxed{^{ extsf{D}}}a_n=1$ $-$ 2 $(n$ $-$ 1 $)$	$oxed{c} a_n =  extsf{3} imes  extsf{5}^{n-1}$	$egin{array}{ccc} \mathtt{D} & a_n = \mathtt{3}  imes \mathtt{5}^n \end{array}$
$oxed{E} a_n = 1  imes -2^{n-1}$	$oxed{F} a_n = 1  imes 2^n$	$a_n = 3  imes 6^{n-1}$	$oxed{F} a_n = 5  imes 5^{n-1}$
5	Find the correct equation to describe this geometric pattern where n=1 is the first term  A $a_n = 3 \times 3^n$	Find the correct equation to describe this geometric pattern where n=1 is the first term	1, 5, 25, 125
3, 9, 27, 81, 243, 729	$egin{aligned} A & a_n = 3  imes 3^n \ & B & a_n = 3  imes 0^{n-1} \ & C & a_n = 3  imes -1^{n-1} \end{aligned}$	$\overline{ ^{A}a_n=a_{n-2}+a_{n-1} }$	$oxed{B} a_n = 1  imes 5^{n-1}$
	$a_n=3 imes 1$ D $a_n=3 imes 3^{n-1}$	$a_n = -3  imes 5^{n-1}$	$oxed{^{ t D}}\!a_n = 1 + \mathbf{5(n-1)}$
	$egin{array}{cccc} {\sf E} & a_n=a_{n-2}+a_{n-1} \ & & & & & & & & & & & & & & & & & & $	$a_n =  extstyle{1}{ imes  extstyle{5}^n}$	${}^{F}\!a_n = 1 - 5(n-1)$
Find the correct equation to describe this geometric pattern where n=1 is the first term	3, 12, 48, 192	8	Find the correct equation to describe this geometric pattern where n=1 is the first term  A $a_n = 3 \times -2^{n-1}$
$oxed{^{A}a_n=3-4(n-1)}$	$a_n = 3 imes \mathtt{4}^n$	3, 6, 12, 24, 48, 96	$egin{array}{cccccccccccccccccccccccccccccccccccc$
$a_n =  extstyle 3  imes 1^{n-1}$	$a_n = 6  imes 4^{n-1}$		$egin{array}{ccc} C & a_n = 3 + 2(n-1) \ & D & a_n = a_{n-2} + a_{n-1} \end{array}$
$oxed{E} a_n = 3  imes 4^{n-1}$	$f a_n = a_{n-2} + a_{n-1}$		$egin{array}{cccc} {\sf E} & a_n = {\sf 3} imes 2^{n-1} \ & & & & & & & & & & & & & & & & & & $