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

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1

Find the correct equation that this pattern rule describes

Start at 1 and add 6 for each term

a $a_n = 1 + 10(n-1)$	**b** $a_n = a_{n-2} + a_{n-1}$
c $a_n = 1 + 6(n-1)$	**d** $a_n = 2 + 6(n-1)$
e $a_n = 1 - 6(n-1)$	**f** $a_n = -2 + 6(n-1)$

2

Find the correct equation that this pattern rule describes

Start at 2 and add 3 for each term

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

3

Find the correct equation that this pattern rule describes

Start at 1 and add 4 for each term

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

4

Find the correct equation that this pattern rule describes

Start at 2 and add 4 for each term

a $a_n = 2 + 4(n-1)$	**b** $a_n = 2 + 5(n-1)$
c $a_n = 2 + 4(n)$	**d** $a_n = a_{n-2} + a_{n-1}$
e $a_n = 2 - 4(n-1)$	**f** $a_n = 2 + 0(n-1)$

5

Find the correct equation that this pattern rule describes

Start at 2 and add 2 for each term

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

6

Find the correct equation that this pattern rule describes

Start at 1 and add 5 for each term

a $a_n = 1 + 5(n-1)$	**b** $a_n = 5 + 5(n-1)$
c $a_n = 1 - 5(n-1)$	**d** $a_n = -3 + 5(n-1)$
e $a_n = 4 + 5(n-1)$	**f** $a_n = 1 + 5(n)$

7

Find the correct equation that this pattern rule describes

Start at 3 and add 2 for each term

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