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

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1

Start at 32 and subtract 6 for each term

Find the correct equation that this pattern rule describes

a $a_n = 32 + 6(n-1)$	**b** $a_n = 32 - 9(n-1)$
c $a_n = 32 - 8(n-1)$	**d** $a_n = 32 - 6(n)$
e $a_n = a_{n-2} + a_{n-1}$	**f** $a_n = 32 - 6(n-1)$

2

Start at 22 and subtract 5 for each term

Find the correct equation that this pattern rule describes

a $a_n = a_{n-2} + a_{n-1}$	**b** $a_n = 20 - 5(n-1)$
c $a_n = 19 - 5(n-1)$	**d** $a_n = 22 - 5(n)$
e $a_n = 22 + 5(n-1)$	**f** $a_n = 22 - 5(n-1)$

3

Start at 18 and subtract 4 for each term

Find the correct equation that this pattern rule describes

a $a_n = 18 - 4(n)$	**b** $a_n = 18 - 3(n-1)$
c $a_n = a_{n-2} + a_{n-1}$	**d** $a_n = 18 + 4(n-1)$
e $a_n = 18 - 5(n-1)$	**f** $a_n = 18 - 4(n-1)$

4

Start at 14 and subtract 3 for each term

Find the correct equation that this pattern rule describes

a $a_n = 14 - 3(n-1)$	**b** $a_n = 14 - 2(n-1)$
c $a_n = 15 - 3(n-1)$	**d** $a_n = 14 + 3(n-1)$
e $a_n = a_{n-2} + a_{n-1}$	**f** $a_n = 14 \times 3^{n-1}$

5

Start at 22 and subtract 4 for each term

Find the correct equation that this pattern rule describes

a $a_n = 23 - 4(n-1)$	**b** $a_n = 22 - 4(n)$
c $a_n = 22 - 4(n-1)$	**d** $a_n = 22 + 4(n-1)$
e $a_n = a_{n-2} + a_{n-1}$	**f** $a_n = 22 - 2(n-1)$

6

Start at 16 and subtract 3 for each term

Find the correct equation that this pattern rule describes

a $a_n = 16 - 6(n-1)$	**b** $a_n = 16 \times 3^{n-1}$
c $a_n = 16 - 3(n-1)$	**d** $a_n = 16 - 0(n-1)$
e $a_n = 16 - 7(n-1)$	**f** $a_n = 16 - 3(n)$

7

Start at 23 and subtract 5 for each term

Find the correct equation that this pattern rule describes

a $a_n = 23 - 3(n-1)$	**b** $a_n = 23 - 5(n)$
c $a_n = 23 - 5(n-1)$	**d** $a_n = a_{n-2} + a_{n-1}$
e $a_n = 23 \times 5^{n-1}$	**f** $a_n = 23 - 1(n-1)$