Math worksheet on *'Patterning - Equation for Decreasing Arithmetic 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 decreasing pattern where n=1 is the first term

18, 14, 10, 6

| | |
|---|---|
| **a** $a_n = 18 - 3(n-1)$ | **b** $a_n = a_{n-2} + a_{n-1}$ |
| **c** $a_n = 18 - 4(n-1)$ | **d** $a_n = 18 \times 4^{n-1}$ |
| **e** $a_n = 17 - 4(n-1)$ | **f** $a_n = 18 - 4(n)$ |

**2** Find the correct equation to describe this decreasing pattern where n=1 is the first term

22, 18, 14, 10, 6

| | |
|---|---|
| **a** $a_n = a_{n-2} + a_{n-1}$ | **b** $a_n = 22 \times 4^{n-1}$ |
| **c** $a_n = 22 - 4(n-1)$ | **d** $a_n = 22 - 8(n-1)$ |
| **e** $a_n = 22 - 4(n)$ | **f** $a_n = 24 - 4(n-1)$ |

**3** Find the correct equation to describe this decreasing pattern where n=1 is the first term

17, 13, 9, 5

| | |
|---|---|
| **a** $a_n = 13 - 4(n-1)$ | **b** $a_n = 17 - 4(n-1)$ |
| **c** $a_n = 17 - 4(n)$ | **d** $a_n = 17 \times 4^{n-1}$ |
| **e** $a_n = a_{n-2} + a_{n-1}$ | **f** $a_n = 14 - 4(n-1)$ |

**4** Find the correct equation to describe this decreasing pattern where n=1 is the first term

13, 10, 7, 4

| | |
|---|---|
| **a** $a_n = 13 - 1(n-1)$ | **b** $a_n = 13 - 3(n)$ |
| **c** $a_n = 13 - 3(n-1)$ | **d** $a_n = 13 - 0(n-1)$ |
| **e** $a_n = a_{n-2} + a_{n-1}$ | **f** $a_n = 13 + 3(n-1)$ |

**5** Find the correct equation to describe this decreasing pattern where n=1 is the first term

21, 16, 11, 6

| | |
|---|---|
| **a** $a_n = 21 - 4(n-1)$ | **b** $a_n = 21 - 8(n-1)$ |
| **c** $a_n = 21 - 5(n)$ | **d** $a_n = a_{n-2} + a_{n-1}$ |
| **e** $a_n = 21 - 5(n-1)$ | **f** $a_n = 21 + 5(n-1)$ |

**6** Find the correct equation to describe this decreasing pattern where n=1 is the first term

14, 11, 8, 5

| | |
|---|---|
| **a** $a_n = 14 - 3(n)$ | **b** $a_n = 14 - 7(n-1)$ |
| **c** $a_n = 14 \times 3^{n-1}$ | **d** $a_n = 14 - 3(n-1)$ |
| **e** $a_n = 18 - 3(n-1)$ | **f** $a_n = a_{n-2} + a_{n-1}$ |

**7** Find the correct equation to describe this decreasing pattern where n=1 is the first term

31, 25, 19, 13, 7

| | |
|---|---|
| **a** $a_n = 31 - 6(n-1)$ | **b** $a_n = 34 - 6(n-1)$ |
| **c** $a_n = 31 \times 6^{n-1}$ | **d** $a_n = 31 - 6(n)$ |
| **e** $a_n = 31 - 3(n-1)$ | **f** $a_n = a_{n-2} + a_{n-1}$ |