



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

Learn online: [app.mobius.academy/math/units/patterns\\_and\\_sums\\_practice/](http://app.mobius.academy/math/units/patterns_and_sums_practice/)

1 Choose the first values that this equation would create starting with  $n=1$

$$a_n = 31 - 6(n - 1)$$

a	35, 29, 23, 17, 11	b	31, 28, 25, 22, 19
c	31, 186, 1,116, 6,696, 40,176	d	31, 37, 43, 49, 55
e	31, 25, 19, 13, 7	f	29, 23, 17, 11, 5

2 Choose the first values that this equation would create starting with  $n=1$

$$a_n = 11 - 2(n - 1)$$

a	11, 22, 44, 88	b	11, 13, 15, 17
c	11, 13, 24, 37	d	11, 12, 13, 14
e	11, 9, 7, 5	f	11, 7, 3, -1

3 Choose the first values that this equation would create starting with  $n=1$

$$a_n = 26 - 5(n - 1)$$

a	26, 18, 10, 2, -6	b	26, 130, 650, 3,250, 16,250
c	24, 19, 14, 9, 4	d	27, 22, 17, 12, 7
e	26, 21, 16, 11, 6	f	22, 17, 12, 7, 2

4 Choose the first values that this equation would create starting with  $n=1$

$$a_n = 33 - 6(n - 1)$$

a	33, 198, 1,188, 7,128, 42,768	b	33, 27, 21, 15, 9
c	33, 39, 45, 51, 57	d	33, 29, 25, 21, 17
e	33, 39, 72, 111, 183	f	29, 23, 17, 11, 5

5 Choose the first values that this equation would create starting with  $n=1$

$$a_n = 17 - 3(n - 1)$$

a	17, 20, 23, 26, 29	b	17, 51, 153, 459, 1,377
c	17, 20, 37, 57, 94	d	17, 15, 13, 11, 9
e	17, 14, 11, 8, 5	f	17, 13, 9, 5, 1

6 Choose the first values that this equation would create starting with  $n=1$

$$a_n = 15 - 3(n - 1)$$

a	15, 16, 17, 18	b	15, 10, 5, 0
c	13, 10, 7, 4	d	15, 18, 33, 51
e	15, 12, 9, 6	f	15, 18, 21, 24

7 Choose the first values that this equation would create starting with  $n=1$

$$a_n = 17 - 4(n - 1)$$

a	17, 21, 38, 59	b	17, 17, 17, 17
c	17, 21, 25, 29	d	19, 15, 11, 7
e	17, 68, 272, 1,088	f	17, 13, 9, 5