



## Patterning - First Values from Equation for Decreasing Arithmetic Pattern

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

$$a_n = 18 - 4(n - 1)$$

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|------------------|------------------|
| A 18, 22, 26, 30 | B 18, 14, 10, 6  |
| C 21, 17, 13, 9  | D 18, 22, 40, 62 |
| E 18, 12, 6, 0   | F 17, 13, 9, 5   |

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

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

- |                  |                  |
|------------------|------------------|
| A 15, 18, 33, 51 | B 13, 10, 7, 4   |
| C 15, 10, 5, 0   | D 15, 12, 9, 6   |
| E 15, 16, 17, 18 | F 15, 18, 21, 24 |

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

$$a_n = 16 - 3(n - 1)$$

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|---------------------------|----------------------|
| A 16, 19, 35, 54, 89      | B 16, 9, 2, -5, -12  |
| C 16, 48, 144, 432, 1,296 | D 16, 19, 22, 25, 28 |
| E 16, 16, 16, 16, 16      | F 16, 13, 10, 7, 4   |

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

$$a_n = 10 - 2(n - 1)$$

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|------------------|------------------|
| A 10, 12, 22, 34 | B 10, 12, 14, 16 |
| C 10, 20, 40, 80 | D 10, 5, 0, -5   |
| E 10, 8, 6, 4    | F 9, 7, 5, 3     |

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

$$a_n = 13 - 3(n - 1)$$

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|----------------|------------------|
| A 15, 12, 9, 6 | B 12, 9, 6, 3    |
| C 13, 10, 7, 4 | D 13, 7, 1, -5   |
| E 13, 9, 5, 1  | F 13, 16, 29, 45 |

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

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

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|----------------------|---------------------------------|
| A 29, 23, 17, 11, 5  | B 35, 29, 23, 17, 11            |
| C 31, 37, 43, 49, 55 | D 31, 28, 25, 22, 19            |
| E 31, 25, 19, 13, 7  | F 31, 186, 1,116, 6,696, 40,176 |

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

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

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|------------------|------------------|
| A 11, 13, 24, 37 | B 11, 13, 15, 17 |
| C 11, 9, 7, 5    | D 11, 12, 13, 14 |
| E 11, 22, 44, 88 | F 11, 7, 3, -1   |

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

$$a_n = 28 - 5(n - 1)$$

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|-------------------------------|----------------------|
| A 28, 140, 700, 3,500, 17,500 | B 28, 21, 14, 7, 0   |
| C 28, 23, 18, 13, 8           | D 28, 33, 38, 43, 48 |
| E 30, 25, 20, 15, 10          | F 25, 20, 15, 10, 5  |