

# Arithmetic Sequences Bell Work

Find the third, fifth and eighth term in the sequence given its explicit formula.

1)  $a_n = 4 + (n - 1)(-5)$

2)  $a_n = 2 + (n + 1)(6)$

3)  $a_n = 3 + (n - 1)(1.5)$

4)  $a_n = 9 + (n - 1)(8)$

**Arithmetic Sequences** Bell Work**Answer Key**

Find the third, fifth and eighth term in the sequence given its explicit formula.

1)  $a_n = 4 + (n - 1)(-5)$

$$a_3 = 4 + (3 - 1)(-5)$$

$$a_3 = 4 - 10 = -6$$

$$a_5 = 4 + (5 - 1)(-5)$$

$$a_5 = 4 - 20 = -16$$

$$a_8 = 4 + (8 - 1)(-5)$$

$$a_8 = 4 - 35 = -31$$

2)  $a_n = 2 + (n + 1)(6)$

$$a_3 = 2 + (3 + 1)(6)$$

$$a_3 = 2 + 24 = 26$$

$$a_5 = 2 + (5 + 1)(6)$$

$$a_5 = 2 + 36 = 38$$

$$a_8 = 2 + (8 + 1)(6)$$

$$a_8 = 2 + 54 = 56$$

3)  $a_n = 3 + (n - 1)(1.5)$

$$a_3 = 3 + (3 - 1)(1.5)$$

$$a_3 = 3 + 3 = 6$$

$$a_5 = 3 + (5 - 1)(1.5)$$

$$a_5 = 3 + 6 = 9$$

$$a_8 = 3 + (8 - 1)(1.5)$$

$$a_8 = 3 + 10.5 = 13.5$$

4)  $a_n = 9 + (n - 1)(8)$

$$a_3 = 9 + (3 - 1)(8)$$

$$a_3 = 9 + 16 = 25$$

$$a_5 = 9 + (5 - 1)(8)$$

$$a_5 = 9 + 32 = 41$$

$$a_8 = 9 + (8 - 1)(8)$$

$$a_8 = 9 + 56 = 65$$