

Station 4

Write the first four terms of the sequence whose general term is given.

1) $a_n = 2^n$

A) 4, 8, 16, 32

B) 1, 4, 9, 16

C) 1, 2, 4, 8

D) 2, 4, 8, 16

Write the first four terms of the sequence defined by the recursion formula.

2) $a_1 = -4$ and $a_n = a_{n-1} - 2$ for $n \geq 2$

A) 4, 6, 8, 10

B) 4, 2, 0, -2

C) -4, -6, -8, -10

D) -4, -4, -4, -2, 0

Find the indicated sum.

3) $\sum_{i=1}^4 (3i - 2)$

A) 13

B) 10

C) 22

D) 21

4) $\sum_{i=3}^5 (i^2 - 3)$

A) 15

B) 41

C) 3

D) 40

Express the sum using summation notation. Use i as the lower limit of summation and i for the index of summation.

5) $2 + 8 + 18 + \dots + 72$

A) $\sum_{i=0}^6 2i^2$

B) $\sum_{i=1}^6 i^2$

C) $\sum_{i=1}^6 2i^2$

D) $\sum_{i=1}^6 22i$