Samples Evaluate summation SOLUTIONS

1. 
$$\sum_{k=0}^{2} 2^{k} k = 2^{0} \times 0 + 2^{1} \times 1 + 2^{2} \times 2 = 0 + 2 + 8 = 10$$

2. 
$$\sum_{k=2}^{3} (-1)^k k = (-1)^2 \times 2 + (-1)^3 \times 3 = 2 - 3 = -1$$

3. 
$$\sum_{j=2}^{6} (-2)^{j} j = (-2)^{2} \times 2 + (-2)^{3} \times 3 + (-2)^{4} \times 4 + (-2)^{5} \times 5 + (-2)^{6} \times 6 = 8 - 24 + 64 - 160 + 384 = 272$$