

Find each of the following:

1. Consider the function  $f(k) = 2k + 3$  where  $f : \mathbb{N} \rightarrow \mathbb{R}$  find the first 6 terms of  $f$ .

2. Consider the formula  $\mu = \frac{\sum_{k=1}^n f(k)}{n}$ . Let  $n = 5$  and  $f(k) = 2k + 3$ . Find  $\mu$

3. Consider the formula  $p = \prod_{k=1}^n f(k)$ . Let  $n = 3$  and  $f(k) = 2k + 3$ . Find  $p$

4. Consider the formula  $g = \sqrt[n]{\prod_{k=1}^n f(k)}$ . Let  $n = 3$  and  $f(k) = 2k + 3$ . Find  $g$ .

5. Consider the formula  $s^2 = \frac{\sum_{k=1}^n (f(k) - \mu)^2}{n - 1}$ . Let  $n = 5$  and  $f(k) = 2k + 3$ . Find  $s^2$