1. Wang Dental Insurance Company has received the following sample of claims:

   80  80  100  80  120

Wang believes that dental claims are distributed as a Gamma distribution with \( \alpha = 33 \) and \( \theta = 2.8 \).

VARSAM is the variance of the sample of claims.

VARDIST is the variance based on the expected distribution.

Calculate VARSAM – VARDIST.
2. You are given \( F(x) = \frac{x^2}{100} \) for \( 0 < x < 10 \).

Calculate \( e(5) \). This is \( E[(X - 5) | X > 5] \).