

1. A rectangular box is measured to be $10 \times 11 \times 14$ with possible error in measurement given by $.1$, $.05$, and $.15$ respectively.

a) Find the error in computing the volume.

b) Find the relative error.

c) Find the percentage error.

2. a) Find the linear approximation to $f(x, y) = \frac{2x + 3}{4y + 1}$ at $(0, 0)$.