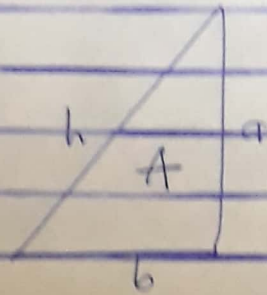


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$$\textcircled{a} \quad 1.5\% = \frac{1.5}{100}, \quad A = \frac{ab}{2}$$

$$\delta A = \frac{\partial A}{\partial a} \cdot \delta a + \frac{\partial A}{\partial b} \cdot \delta b$$

$$\therefore \frac{\partial A}{\partial a} = \frac{b}{2}, \quad \frac{\partial A}{\partial b} = \frac{a}{2}, \quad \delta a = + \frac{1.5a}{100}, \quad \delta b = + \frac{1.5b}{100}$$

$$\delta A = \frac{b}{2} \left(+ \frac{1.5a}{100} \right) + \frac{a}{2} \left(+ \frac{1.5b}{100} \right)$$

$$\delta A = \frac{+ab}{2} \left(\frac{1.5}{100} \right) + \frac{+ab}{2} \left(\frac{1.5}{100} \right)$$

$$\delta A = \pm A \left(\frac{1.5}{100} \right) + A \left(\frac{1.5}{100} \right)$$

$$\delta A = \pm A \left(\frac{3}{100} \right)$$

$$\delta A = \pm 3\% A$$

$$\textcircled{b} \quad C = \sqrt{a^2 + b^2} = (a^2 + b^2)^{1/2} \quad \delta C = \frac{1}{2} (a^2 + b^2)^{-1/2}$$

$$\delta C = \frac{\partial C}{\partial a} \cdot \delta a + \frac{\partial C}{\partial b} \cdot \delta b$$

$$\frac{\partial C}{\partial a} = \frac{a}{\sqrt{a^2 + b^2}}, \quad \frac{\partial C}{\partial b} = \frac{b}{\sqrt{a^2 + b^2}}, \quad \delta a = + \frac{1.5a}{100}$$

$$\delta b = + \frac{1.5b}{100}$$

$$\delta C = \frac{a}{\sqrt{a^2 + b^2}} \left(+ \frac{1.5a}{100} \right) + \frac{b}{\sqrt{a^2 + b^2}} \left(+ \frac{1.5b}{100} \right)$$

$$\delta c = + \frac{1.5}{100} \left(\frac{a^2 + b^2}{\sqrt{a^2 + b^2}} \right)$$

$$\delta c = + \frac{1.5}{100} \left(\frac{c^2}{c} \right)$$

$$\delta c = + \frac{1.5}{100} \left(\sqrt{a^2 + b^2} \right)$$

$$\delta c = + \frac{1.5}{100} c$$

$$\delta c = 1.5\% \text{ of } c$$