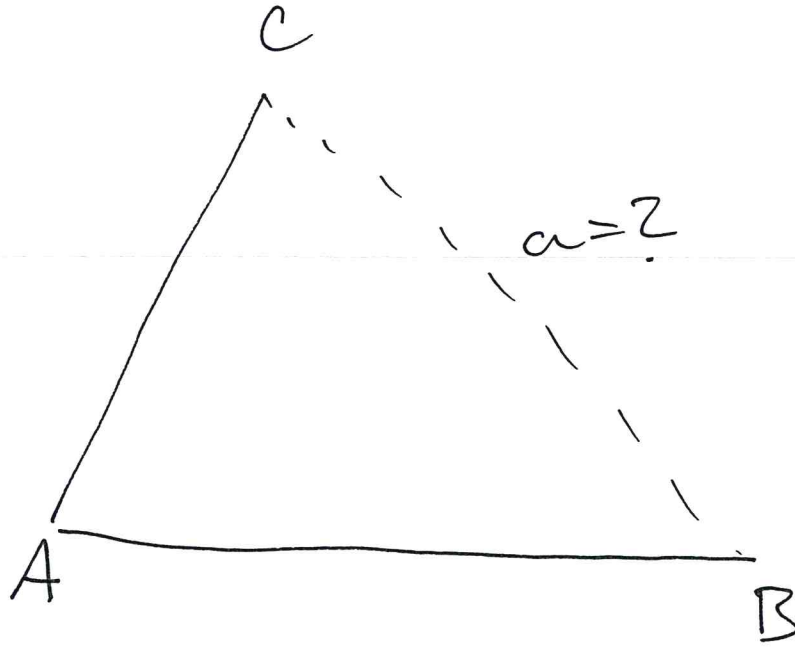


$$b_0 = 5$$

$$c_0 = 8$$

$$d_0 = \frac{\pi}{3}$$

$$a = \sqrt{b^2 + c^2 - 2bc \cos d}$$
$$25 + 64 - 80 \cdot \frac{1}{2}$$



$$a = 7 + \Delta a$$

$$f(b, c, d) = \sqrt{b^2 + c^2 - 2bc \cos d}$$

$$f(b_0, c_0, d_0) = a_0 = 7$$

$$f(b_0 + \Delta b, c_0 + \Delta c, d_0 + \Delta d) = ?$$

$$\frac{1}{7} \Delta b + \frac{11}{14} \Delta c + \frac{20}{7} \sqrt{3} \Delta d$$

$$\Delta f = \Delta a = \frac{\partial f}{\partial b} (b_0, c_0, t_0) \cdot \Delta b + \dots$$

$$\frac{1}{2} \left(\frac{-1}{2} \right) \cdot (2b - 2c \cos \alpha)$$

$$\frac{1}{2} - \frac{1}{7} \cdot (10 - 8) = \frac{1}{7}$$

$$\frac{1}{7} \Delta b + \frac{11}{14} \Delta c + \frac{20}{7} \sqrt{3} \Delta \alpha$$