



$$b^2 = a^2 + c^2 - 2ac \cdot \cos(45^\circ)$$

$$b^2 = a^2 + c^2 - ac\sqrt{2} \quad (1)$$

$$\frac{c}{\sin(120^\circ)} = \frac{l}{\sin(45^\circ)} \Rightarrow c = \frac{\sqrt{3}}{\sqrt{2}} \cdot l \quad (2)$$

$$\frac{b}{\sin(60^\circ)} = \frac{l}{\sin(\mu)} \Rightarrow b = \frac{\sqrt{3}}{2\sin(\mu)} \cdot l \quad (3)$$

$$\frac{a/3}{\sin(15^\circ)} = \frac{l}{\sin(45^\circ)} \Rightarrow a = \frac{6 \cdot \sin(15^\circ)}{\sqrt{2} \sin(\mu)} \cdot l \quad (4)$$

$$(1) \Rightarrow \frac{3l^2}{4\sin^2\mu} = 18\sin^2(15^\circ) \cdot l^2 + \frac{3}{2}l^2 - 3\sqrt{6}\sin(15^\circ) \cdot l^2 / \sin(\mu) = c^2$$

$$\frac{3}{4\sin^2\mu} = 18 \cdot \frac{(1 - \frac{\sqrt{3}}{2})}{2} + \frac{3}{2} - 3\sqrt{6} \cdot \frac{\sqrt{1 - \frac{\sqrt{3}}{2}}}{\sqrt{2}}$$

$$\frac{3}{4\sin^2\mu} = \frac{21}{2} - \frac{9\sqrt{3}}{2} - 3\sqrt{6} \cdot \sqrt{\left(\frac{\sqrt{3}}{2} - \frac{1}{2}\right)^2}$$

$$\frac{3}{4\sin^2\mu} = \frac{21}{2} - \frac{9\sqrt{3}}{2} + \frac{3\sqrt{3}}{2} - \frac{9}{2} = \frac{6 - 3\sqrt{3}}{2}$$

$$\frac{1}{4\sin^2\mu} = 2 - \sqrt{3} \Rightarrow \sin^2\mu = \frac{1}{4(2 - \sqrt{3})} \cdot \frac{2 + \sqrt{3}}{2 + \sqrt{3}}$$

$$\sin^2\mu = \frac{2 + \sqrt{3}}{4} = \frac{1 + \frac{\sqrt{3}}{2}}{2} \Rightarrow \sin^2(\mu) = \cos^2(15^\circ)$$

$$\mu = 75^\circ$$

$$\alpha = 60^\circ$$