



$$AO=2.5$$

$$\angle OAC=55^\circ$$

$$\cos(\angle OAC)=OA/AC$$

$$\cos(55^\circ)=2.5/AC$$

$$AC \cdot \cos(55^\circ)=2.5$$

$$AC=2.5/\cos(55^\circ)$$

$$AC=4.358616989052744$$

$$\sin(b)/\sin(a)=1/1.5$$

$$a=55^\circ$$

$$\sin(b)/\sin(55^\circ)=1/1.5$$

$$b=33.09995908918575^\circ$$

$$\cos(b)=OA/AB$$

$$AB \cdot \cos(b)=2.5/AC$$

$$AB=2.5/\cos(b)$$

$$AB=2.984293876605293$$

$$OC=\sqrt{AC^2-OA^2}$$

$$OC=\sqrt{4.358616989052744^2-2.5^2}=3.570370016855285$$

$$OB=\sqrt{AB^2-OA^2}$$

$$OB=\sqrt{2.984293876605293^2-2.5^2}=1.629726953186897$$

$$BC=OC-OB=1.940643063668388 \approx 1.94 \text{ cm}$$