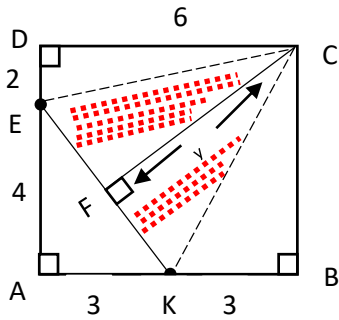


Circle R = 6



$$\sphericalangle F = 90^\circ$$

ABCD is a square

$$DC = 6$$

$$DE = 2$$

$$KB = 3$$

We want to prove that

$$FC = y = 6$$

$$\Delta EAK \Rightarrow 3^2 + 4^2 = (EK)^2$$

$$EK = 5$$

$$\Delta ECK \Rightarrow S = \frac{5 \cdot y}{2}$$

$$\Delta KBC \Rightarrow S = \frac{3 \cdot 6}{2}$$

$$\Delta CDE \Rightarrow S = \frac{2 \cdot 6}{2}$$

$$\frac{5y}{2} + \frac{2 \cdot 6}{2} + \frac{3 \cdot 6}{2} + \frac{3 \cdot 4}{2} = 6 \cdot 6$$

$$5y + 12 + 18 + 12 = 36 \cdot 2$$

$$5y = 30 \Rightarrow y = 6$$

$$\Delta CDE \cong \Delta BCK$$

$$\sphericalangle B = \sphericalangle F = 90^\circ$$

$$y = CB = 6$$

$$CK = CK$$

$$FK = BK = 3$$

$$EF = 5 - 3 = 2$$

Point C is the center of a circle

$$R = 6$$