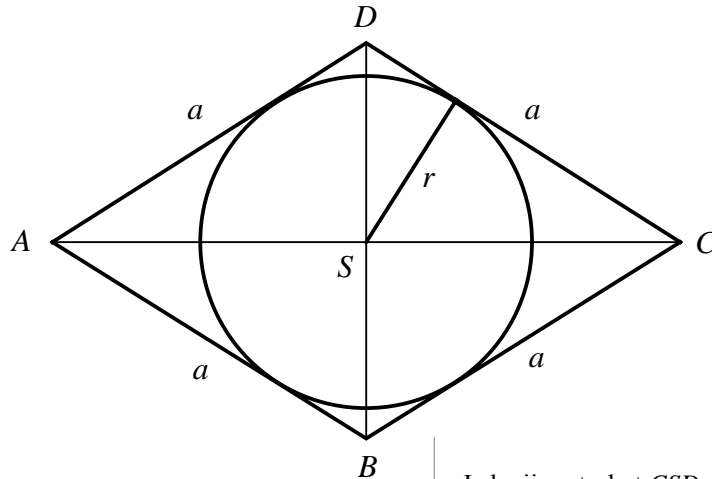


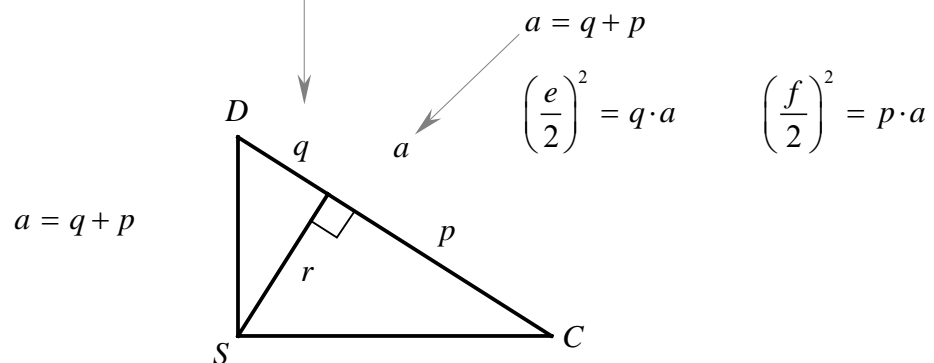
M-14. Dijagonale romba imaju duljine 30 cm i 40 cm. Dirališna točka rombu upisane kružnice dijeli stranicu romba na dva odsječka. Duljina većeg od njih iznosi

- A. 15 B. 16 C. 17.25 D. 17.75 E. 16.75

Nacrtajmo skicu:



Izdvojimo trokut CSD
i primjenimo Euklidov teorem



$$a^2 = \left(\frac{e}{2}\right)^2 + \left(\frac{f}{2}\right)^2$$

$$a^2 = \left(\frac{40}{2}\right)^2 + \left(\frac{30}{2}\right)^2$$

$$a^2 = 20^2 + 15^2$$

$$a^2 = 625$$

$$a = 25$$

$$\left(\frac{e}{2}\right)^2 = q \cdot a$$

$$\left(\frac{30}{2}\right)^2 = q \cdot 25$$

$$15^2 = q \cdot 25$$

$$225 = 25q \quad /: 25$$

$$\frac{225}{25} = q$$

$$q = 9$$

$$\left(\frac{f}{2}\right)^2 = p \cdot a$$

$$\left(\frac{40}{2}\right)^2 = p \cdot 25$$

$$20^2 = p \cdot 25$$

$$400 = 25p \quad /: 25$$

$$\frac{400}{25} = p$$

$$p = 16$$

⇓

to je duljina većeg odsječka