

DATI

$$A_1 - A_2 = 25\pi \text{ cm}^2$$

$$\frac{\ell_1}{\ell_2} = \frac{13}{12}$$

$$r_1 > r_2$$

RISOLUZIONE

$$\frac{\ell_1}{\ell_2} = \frac{2\pi r_1}{2\pi r_2} = \frac{13}{12} \Rightarrow \frac{r_1}{r_2} = \frac{13}{12} \Rightarrow r_1 = \frac{13}{12} r_2$$

$$r_2 = x \quad e \quad r_1 = \frac{13}{12} x$$

$$A_1 - A_2 = (r_1^2 - r_2^2) \pi = 25\pi$$

$$\left(\frac{13}{12}\right)^2 x^2 - x^2 = 25$$

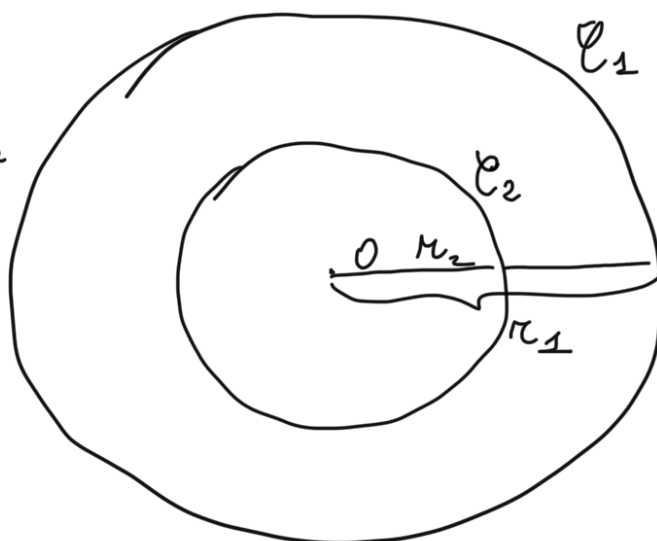
$$\left(\left(\frac{13}{12}\right)^2 - 1\right) x^2 = 25$$

$$\left(\frac{169}{144} - 1\right) x^2 = 25$$

$$\frac{169 - 144}{144} x^2 = 25$$

$$\frac{25}{144} x^2 = 25 \Rightarrow x^2 = 144 \Rightarrow x = 12$$

$$r_2 = 12 \text{ cm} \quad r_1 = \frac{13}{12} \cdot 12 = 13 \text{ cm}$$



TESI

r_1

r_2