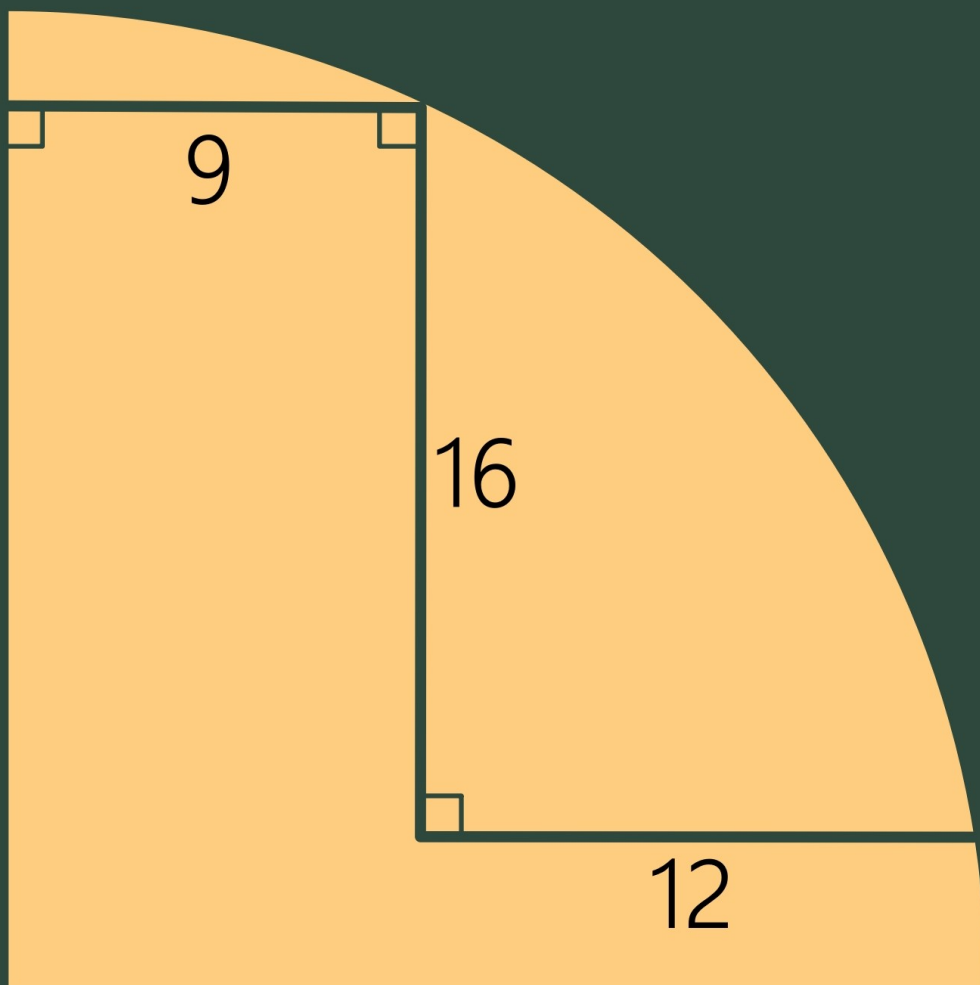
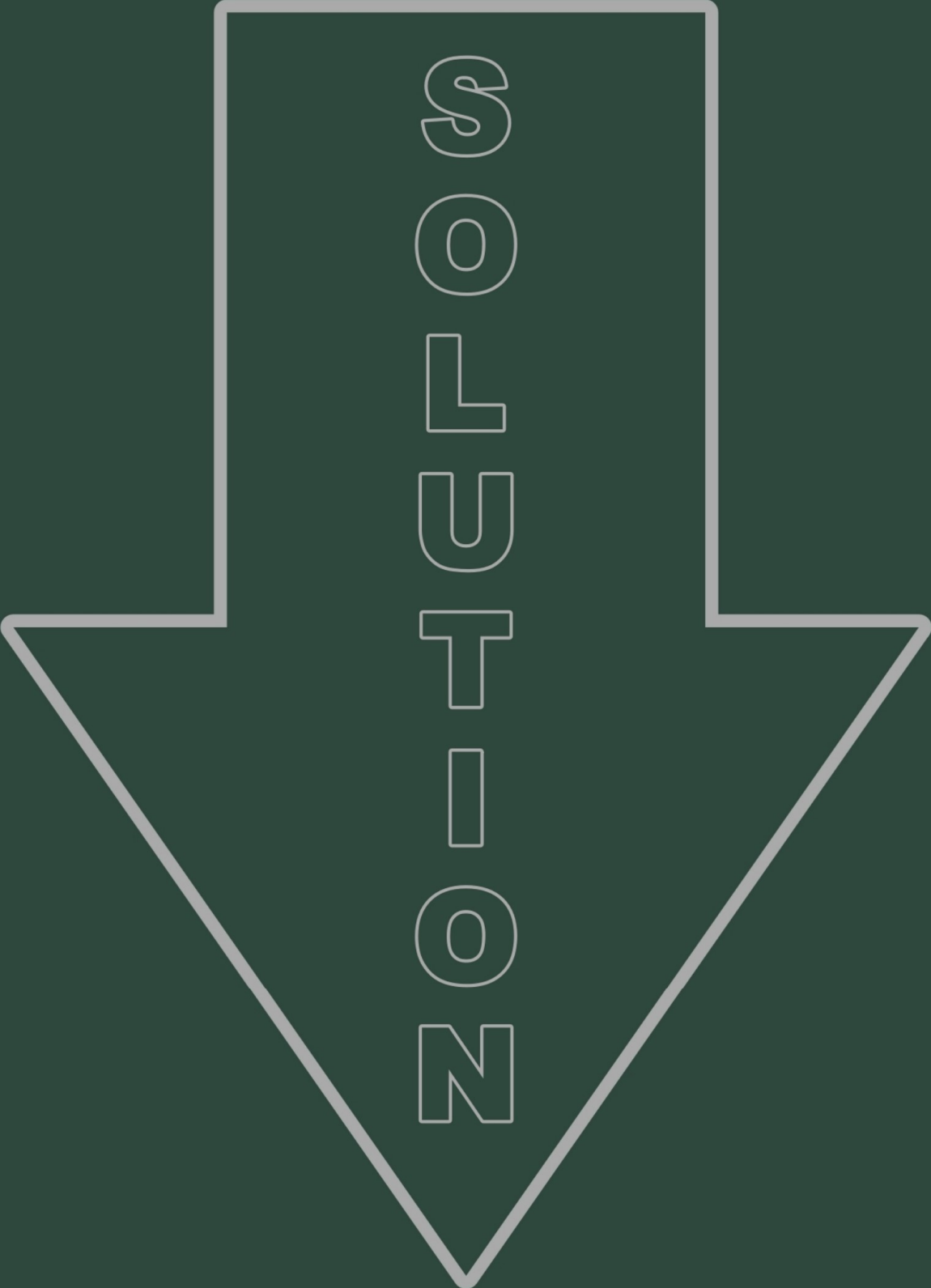


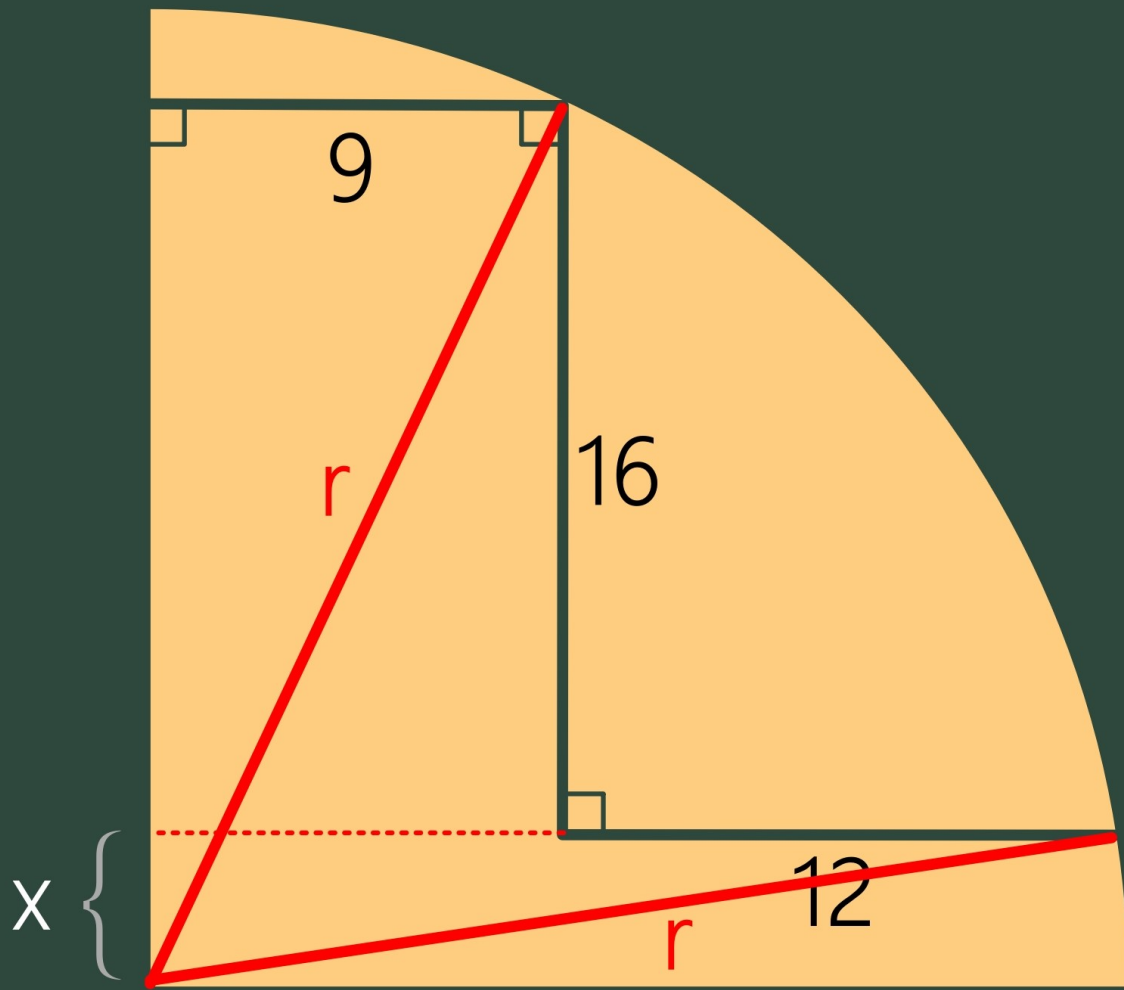
calculer le rayon



de ce
quart de cercle



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----- R É P O N S E -----

soit:

- r le rayon du cercle
- x (voir image)

conséquence:

$$\begin{array}{l} | r^2 = 9^2 + (16 + x)^2 \\ | \\ | r^2 = (12 + 9)^2 + x^2 \end{array}$$

$$9^2 + (16 + x)^2 = (12 + 9)^2 + x^2$$

$$81 + 256 + 32x + x^2 = 441 + x^2$$

$$32x = 441 - 81 - 256$$

$$32x = 104$$

$$x = 104/32$$

$$x = 3,25$$

rappel: $r^2 = (12 + 9)^2 + x^2$ (voir plus haut)

$$r^2 = (12 + 9)^2 + 3,25^2$$

$$r^2 = 441 + 10,5625$$

$$r^2 = 451,5625$$

$$r = \sqrt{451,5625}$$

■ rayon = 21,25