

$$5. AE \cdot AD = AC \cdot AB$$

Perímetro

$$(4 + 2R) \cdot 4 = 18 \cdot 8$$

$$16 + 8R = 144$$

$$8R = 128$$

$$R = 16$$

Perímetro

$$AC + CD + DA =$$

$$18 + 16 + 20 = 54$$

alternativa: E

$$4. AE \cdot EB = 3$$

$$CE = ED$$

$$CE \cdot ED = AE \cdot EB = 3$$

$$CE^2 = 3$$

$$CE = \sqrt{3}$$

$$CD = CE + ED = \sqrt{3} + \sqrt{3} = 2\sqrt{3} \quad \text{alternativa: B}$$

$$5. AE \cdot AD = AC \cdot AB$$

$$3. AO^2 = 6^2 + 2,5^2$$

$$AB^2 = 36 + 6,25$$

$$AB = \sqrt{42,25}$$

$$AB = 6,5$$

$$AB = 6,5 - 2,5$$

$$AB = 4$$

$$2. \frac{PB}{PA} = \frac{PA}{PC} \rightarrow PA^2 = PB \cdot PC$$

$$(3PC)^2 = PB \cdot PC$$

$$9PC^2 = PB \cdot PC$$

$$9PC = PB$$

$$PB = 9PC$$

alternativa: B

Tarefa básica - Potência de um ponto

$$1. AB^2 = AC \cdot AD$$

$$AB = 8 \text{ cm}$$

$$AC = CD = x$$

$$AD = (AC + CD)$$

$$\rightarrow 8^2 = x(x + x)$$

$$64 = x \cdot 2 \cdot x$$

$$64 = 2 \cdot x^2$$

$$x^2 = \frac{64}{2}$$

$$x^2 = 32$$

$$x = \sqrt{32}$$

$$x = 4\sqrt{2}$$

alternativa: E