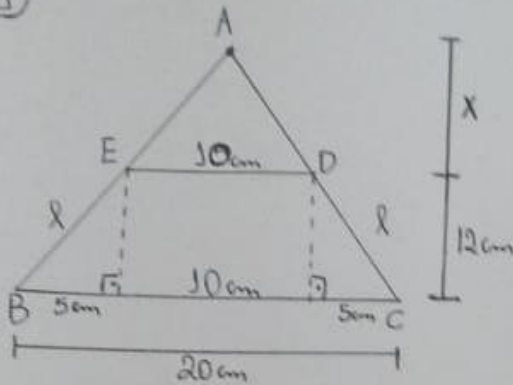


QUESTÕES OBJETIVAS

11- C 12- B 13- D 14- B 15- A

QUESTÕES DISCURSIVAS

1)



a)

$$l^2 = 5^2 + 12^2$$

$$l^2 = 25 + 144$$

$$l^2 = 169$$

$$l = \pm 13$$

$$l = 13 \text{ cm}$$

Resposta:

$$2p = 20 + 10 + 26$$

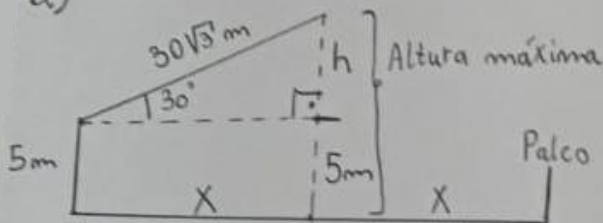
$$2p = 56 \text{ cm}$$

b) $\Delta ABC \sim \Delta ADE$

$$k = \frac{1}{2}; \quad \frac{x}{x+12} = \frac{1}{2} \Rightarrow 2x = x+12 \Rightarrow x = 12 \text{ cm}$$

Resposta: A altura do ΔABC vale 24 cm.

2)



a) $\cos 30^\circ = \frac{x}{30\sqrt{3}}$

$$\frac{\sqrt{3}}{2} = \frac{x}{30\sqrt{3}}$$

$$2x = 90$$

$$x = 45 \text{ m}$$

Resposta: A distância da base da torre até a base do palco vale 90 metros.

b) $\text{Sen } 30^\circ = \frac{h}{30\sqrt{3}}$

$$\frac{1}{2} = \frac{h}{30\sqrt{3}}$$

$$2h = 30\sqrt{3}$$

$$h = 15 \cdot 1,7$$

$$h = 25,5 \text{ m}$$

Resposta: $25,5 + 5 = 30,5 \text{ m}$

A altura máxima do drone vale 30,5 m.

