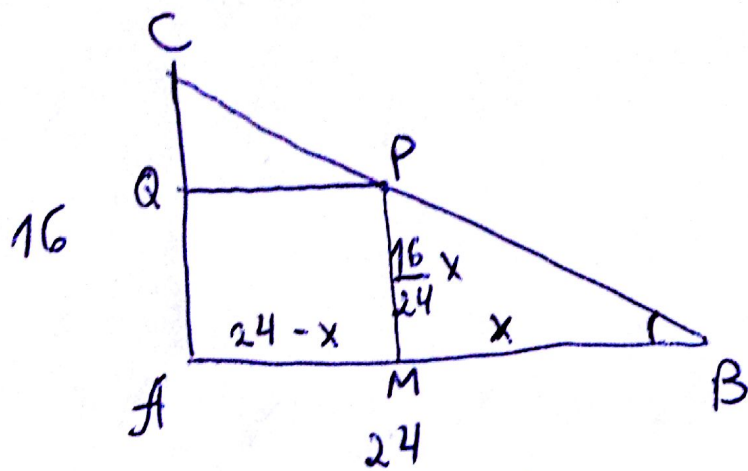




$$\text{tg} \angle ABC = \frac{16}{24}$$

$$\triangle MBP: \text{tg} \angle MBP = \frac{16}{24}$$

$$\text{tg} \angle MBP = \frac{MP}{MB} = \frac{16}{24}$$

$$\Rightarrow MP = \frac{16}{24} MB = \frac{16}{24} x$$

$$S_{AMPQ} = \frac{16}{24} x (24 - x) = \frac{16}{24} (24x - x^2) =$$

$$= \frac{16}{24} (144 - 144 + 24x - x^2) = \frac{16}{24} (144 - (144 - 24x + x^2))$$

$$= \frac{16}{24} (144 - (12 - x)^2) \Rightarrow S_{\max} = \frac{16}{24} \cdot 144 = 96 \text{ cm}^2$$

$$\text{когато } (12 - x)^2 = 0 \Rightarrow x = 12$$

$$\Rightarrow AM = 24 - 12 = 12 \text{ cm}$$

$$AQ = \frac{16}{24} \cdot 12 = 8 \text{ cm}$$

Отг: 12 cm, 8 cm