

2.26.16

$$w = \frac{1}{5} \cdot l$$

The width of a rectangle is one-fifth its' length. If its' perimeter is 48 cm, what is its' area? Put the appropriate markings on the rectangle below.

$$P = 2l + 2w \quad A = l \cdot w$$

$$P = 48 \text{ cm}$$

$$w = \frac{1}{5} l = \frac{1}{5} 20 = \boxed{4 \text{ cm}}$$

$$l = \boxed{l = 20 \text{ cm}}$$

$$48 = 2l + 2\left(\frac{1}{5}l\right)$$

$$48 = 2l \oplus \cdot 4l$$

$$\frac{48}{2.4} = \frac{2.4 \cdot l}{2.4}$$

$$\boxed{20 \text{ cm} = l}$$

$$A = 20 \text{ cm} \cdot 4 \text{ cm}$$

$$\boxed{A = 80 \text{ cm}^2}$$

