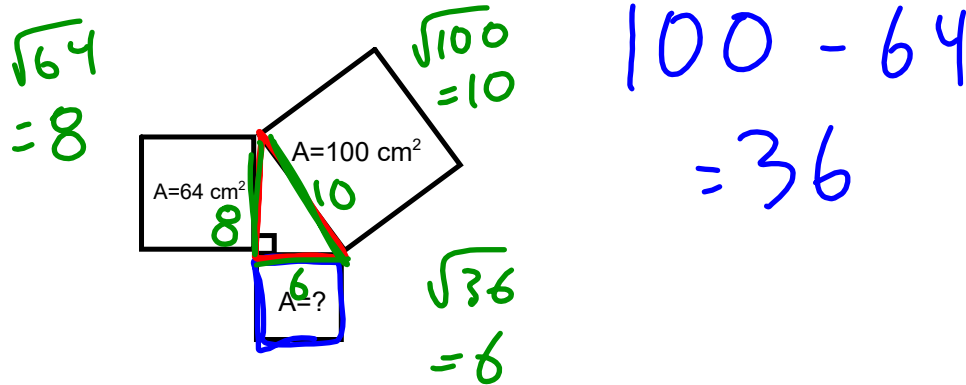


Pythagorean Theorem and Composite Figures

Find the missing area in the following.



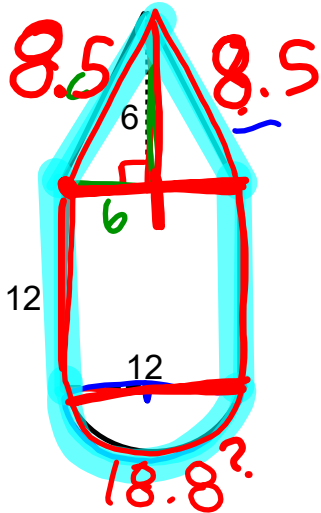
Find the perimeter of the inside triangle.

$$6 + 8 + 10 = 24$$

We are building a patio with a stone border.

The dimensions are given in metres below.

Calculate the cost (including 13% tax), of the border if the stone is \$3/metre.



$$a^2 + b^2 = c^2$$

$$6^2 + 6^2 = c^2$$

$$36 + 36 = c^2$$

$$\sqrt{72} = \sqrt{c^2}$$

$$8.5 = c$$

~~$$\$324.80$$~~
$$\$201.70$$

~~$$\$266.80$$~~

$$\$202.18$$

$$\$236.52$$

$$\$242.70$$

$$\$243.43$$

$$\$202.38$$

$$C = \pi d$$

$$C = \pi(12)$$

$$C = \frac{37.7}{2}$$

$$C = 18.84$$

$$P = 8.5 + 8.5 + 12 + 12 + 18.8$$

$$= 59.8 \text{ m}$$

$$\text{Cost} = 59.8 \times 3$$

$$= 179.46$$

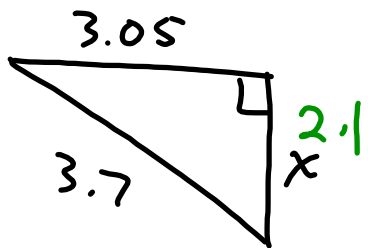
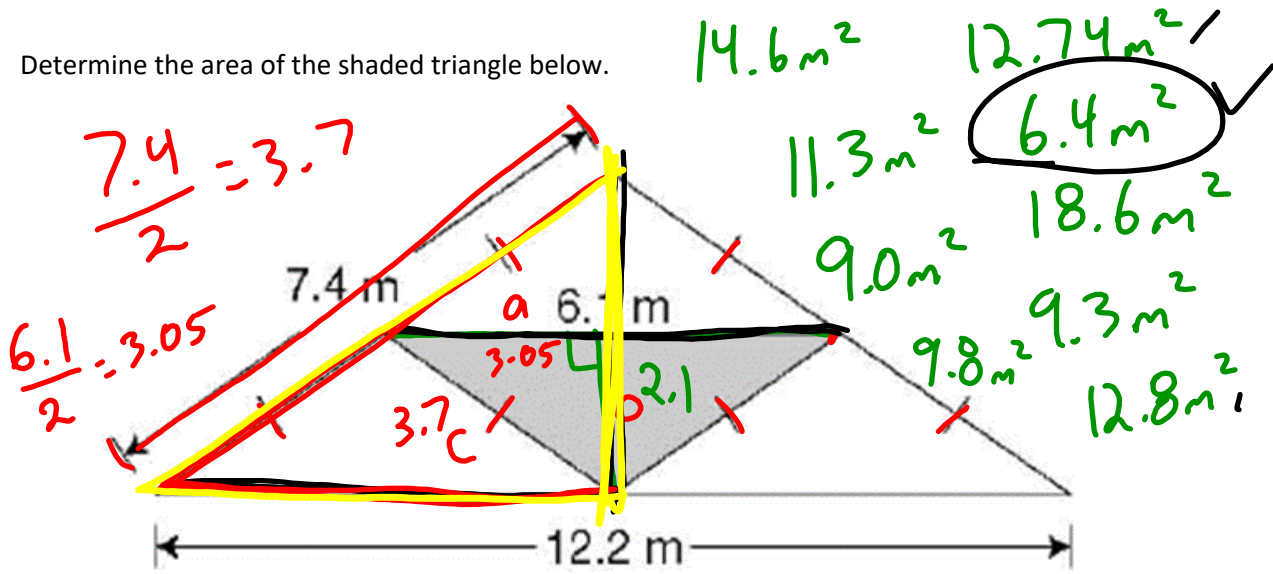
$$\times 0.13$$

$$\text{tax} = 23.32$$

$$179.46 \times 1.13$$

$$= \$202.72$$

Determine the area of the shaded triangle below.



$$c^2 - a^2 = b^2$$

$$3.7^2 - 3.05^2 = b^2$$

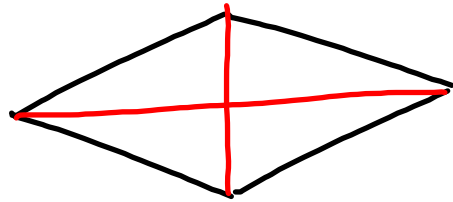
$$\sqrt{4.3875} = \sqrt{b^2}$$

$$2.1 = b$$

$$A(\Delta) = \frac{b \cdot h}{2}$$

$$= \frac{6.1 \times 2.1}{2}$$

$$= 6.4 \text{ m}^2$$



Determine the perimeter and area of the figure below.

$C = \pi d$
 $= \pi(5)$
 $= 15.7$
 $\frac{15.7}{2}$
 $= 7.85$

$4.7^2 - 4^2 = ?^2$
 $22.09 - 16 = ?^2$
 $\sqrt{6.09} = \sqrt{?^2}$
 $2.5 = ?$

$P = 27.17 \text{ cm}$