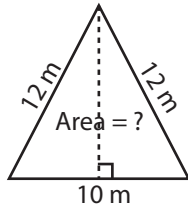


Isosceles Triangle - Finding Area

Example:



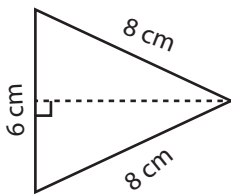
**In an isosceles triangle, altitude drawn to the base is a median.
Median divides base into equal line segments.**

$$\begin{aligned} \text{height} &= \sqrt{12^2 - 5^2} \\ &= \sqrt{144 - 25} \\ &= \sqrt{119} \\ &= \mathbf{10.91 \text{ m}} \end{aligned}$$

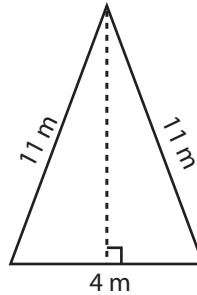
$$\begin{aligned} \text{Area} &= \frac{1}{2} \times b \times h \\ &= \frac{1}{2} \times 10 \times 10.91 \\ &= \mathbf{54.55 \text{ m}^2} \end{aligned}$$

Find the area of each isosceles triangle. Round the answer to 2 decimal places.

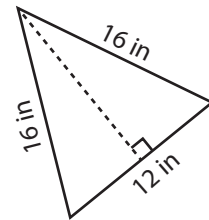
1)

Area =

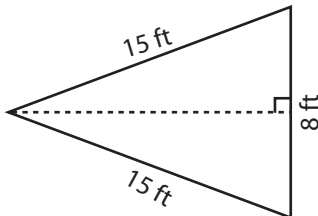
2)

Area =

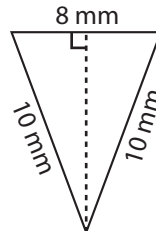
3)

Area =

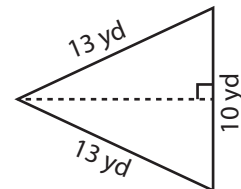
4)

Area =

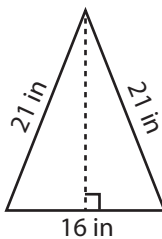
5)

Area =

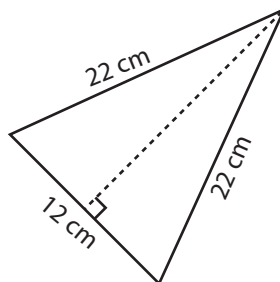
6)

Area =

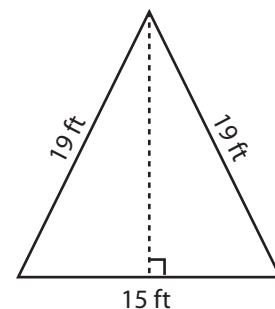
7)

Area =

8)

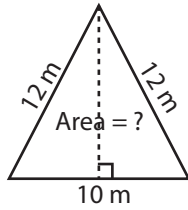
Area =

9)

Area =

Answer key

Example:



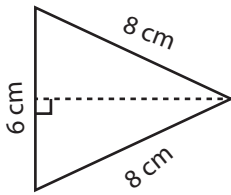
In an isosceles triangle, altitude drawn to the base is a median.
Median divides base into equal line segments.

$$\begin{aligned} \text{height} &= \sqrt{12^2 - 5^2} \\ &= \sqrt{144 - 25} \\ &= \sqrt{119} \\ &= \mathbf{10.91 \text{ m}} \end{aligned}$$

$$\begin{aligned} \text{Area} &= \frac{1}{2} \times b \times h \\ &= \frac{1}{2} \times 10 \times 10.91 \\ &= \mathbf{54.55 \text{ m}^2} \end{aligned}$$

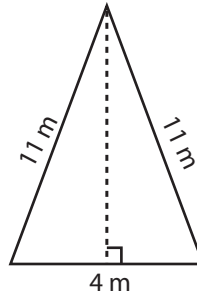
Find the area of each isosceles triangle. Round the answer to 2 decimal places.

1)



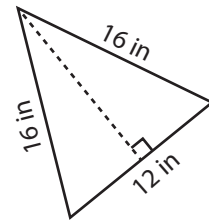
Area = **22.25 cm²**

2)



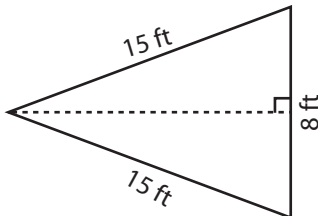
Area = **21.63 m²**

3)



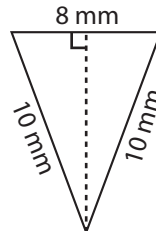
Area = **88.99 in²**

4)



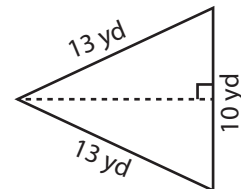
Area = **57.83 ft²**

5)



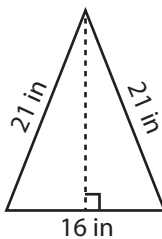
Area = **36.66 mm²**

6)



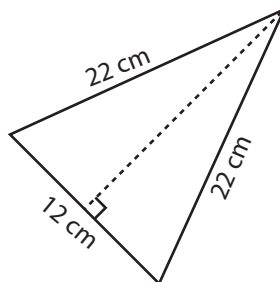
Area = **60 yd²**

7)



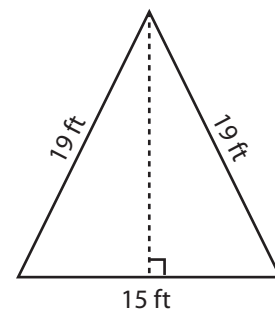
Area = **155.33 in²**

8)



Area = **127 cm²**

9)



Area = **130.93 ft²**