

# Area of Triangles

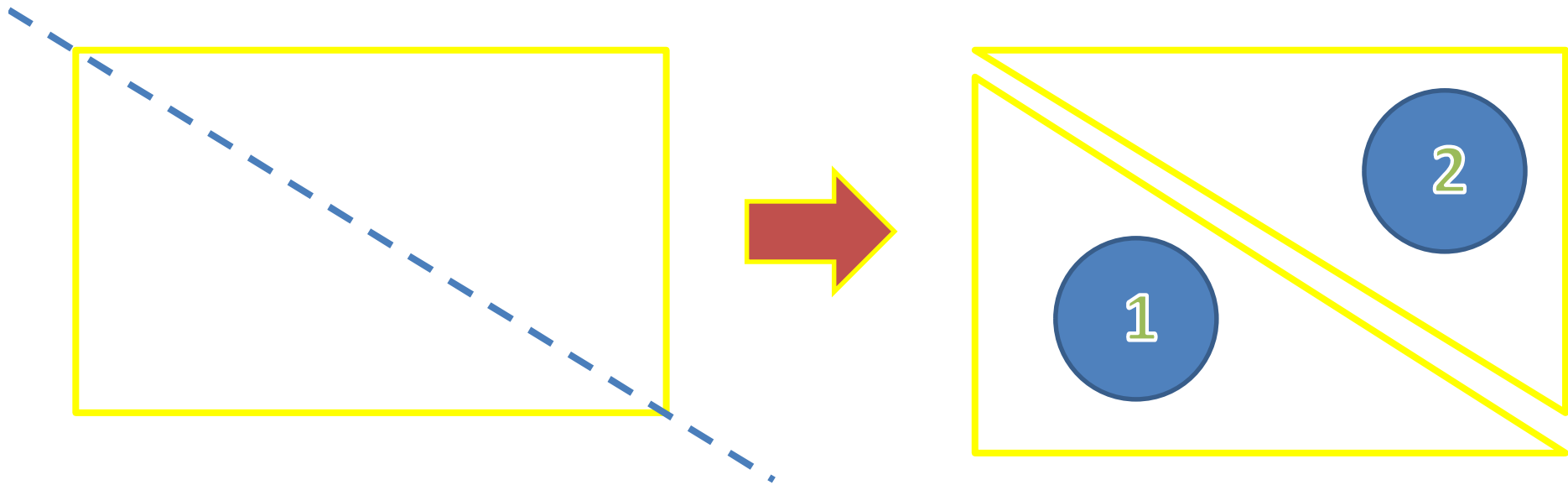
08/01/2021

## Learning Objectives:

- Able to calculate the area of a rectangle
- Able to calculate the area of a triangle
- Able to calculate the area of a compound shape

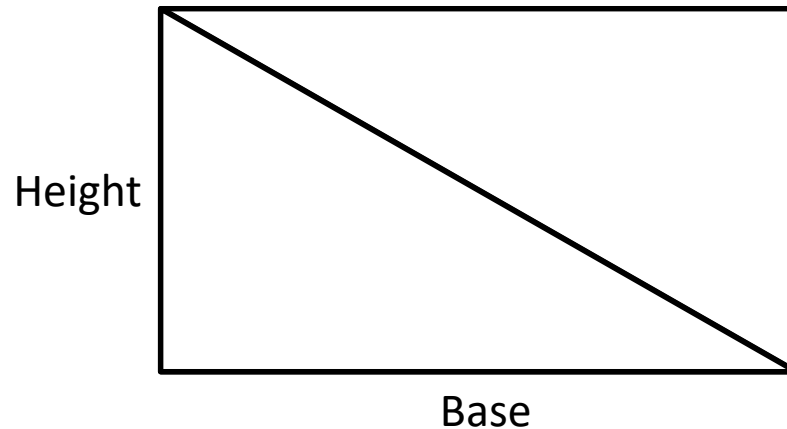


**Get a rectangular piece of paper and cut it diagonally as shown below.**



**You will obtain two triangles with each triangle having half the area of the rectangle.**

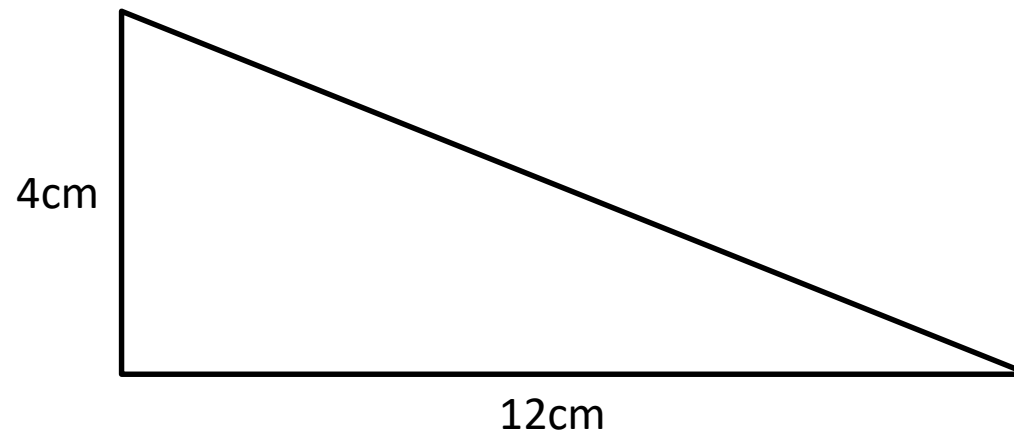
# Area of Triangles



- **Area of a triangle =  $\frac{1}{2}$  x area of rectangle**  
**=  $\frac{1}{2}$  x base x height**  
**=  $\frac{1}{2}bh$**

# Area of a Triangle

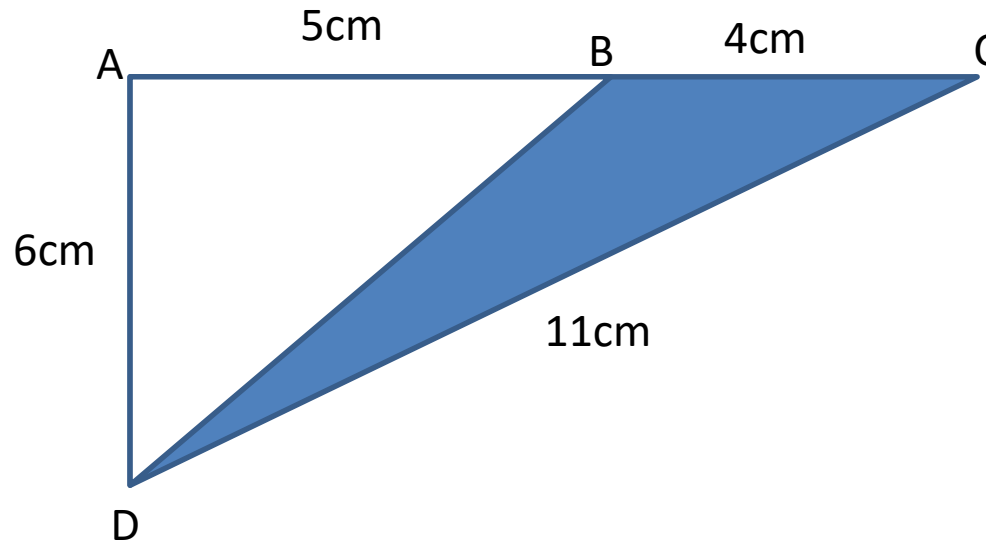
- Calculate the area of this triangle.



$$\begin{aligned}\text{Area} &= \frac{1}{2} \times 4 \times 12 \\ &= 24\text{cm}^2\end{aligned}$$

# Area of Triangles

- Find the area of the shaded triangle BCD.



$$\begin{aligned}\text{Area of ACD} &= \frac{1}{2} \times 9 \times 6 \\ &= 27\text{cm}^2\end{aligned}$$

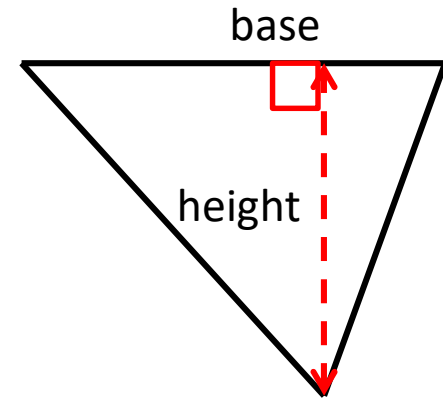
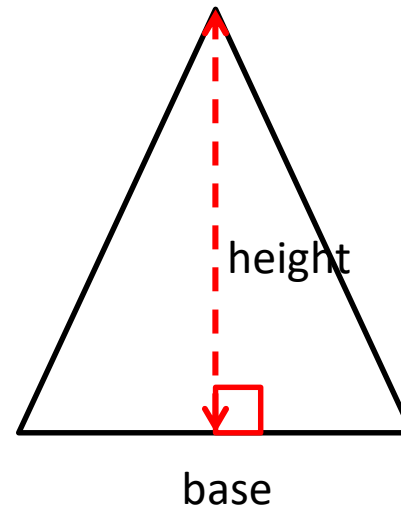
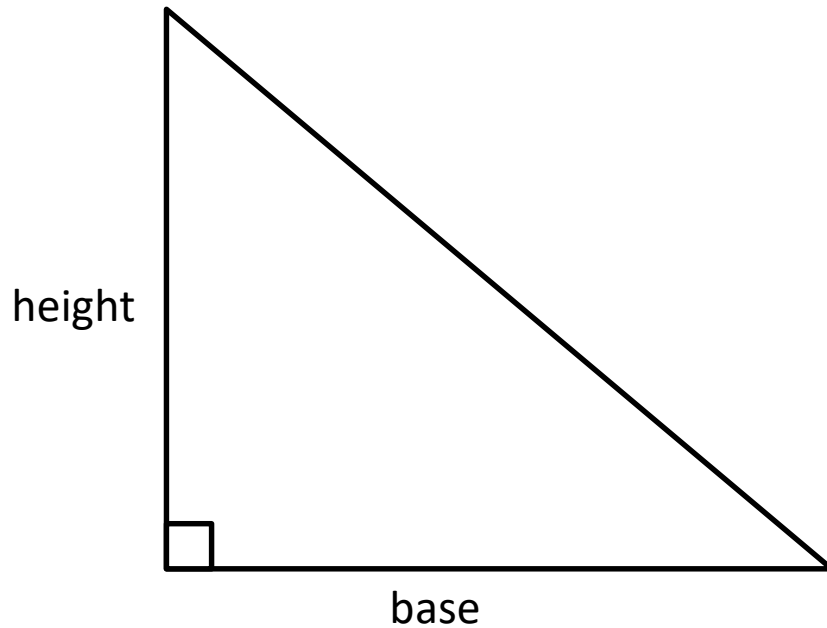
$$\begin{aligned}\text{Area of ABD} &= \frac{1}{2} \times 5 \times 6 \\ &= 15\text{cm}^2\end{aligned}$$

$$\begin{aligned}\text{Area of BCD} &= 27 - 15 \\ &= 12\text{cm}^2\end{aligned}$$

# Area of Triangles

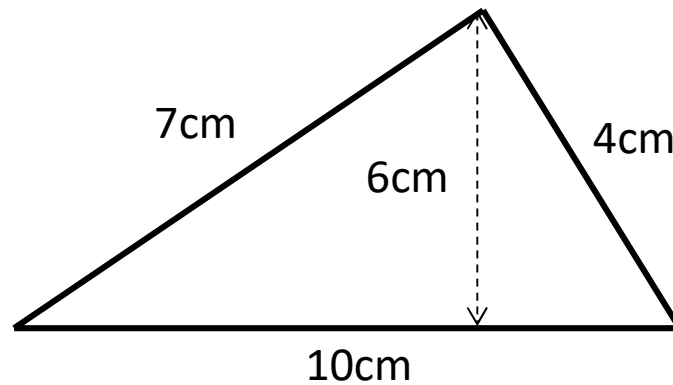
- Area =  $\frac{\text{base} \times \text{height}}{2}$

The **perpendicular**  
height



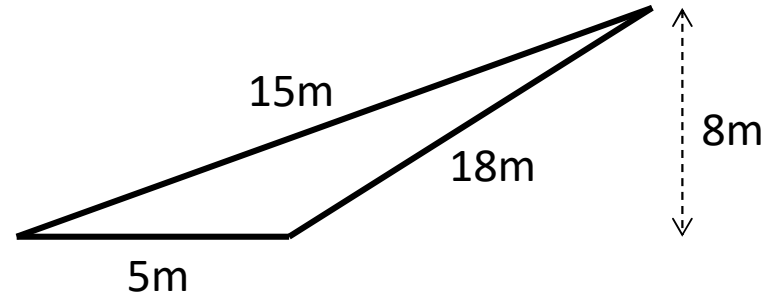
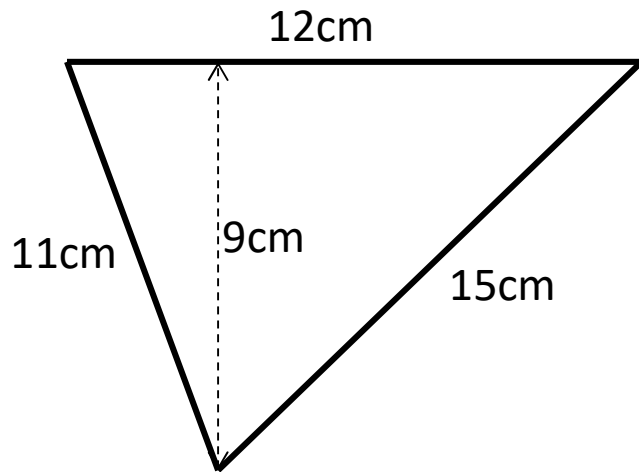
# Area of Triangles

- Find the area of the following triangle.



$$\begin{aligned}\text{Area} &= \frac{1}{2} \times 10 \times 6 \\ &= 30\text{cm}^2\end{aligned}$$

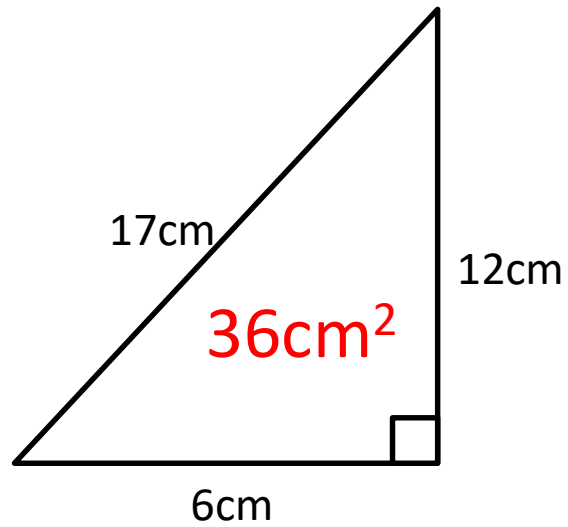
# Area of Triangles



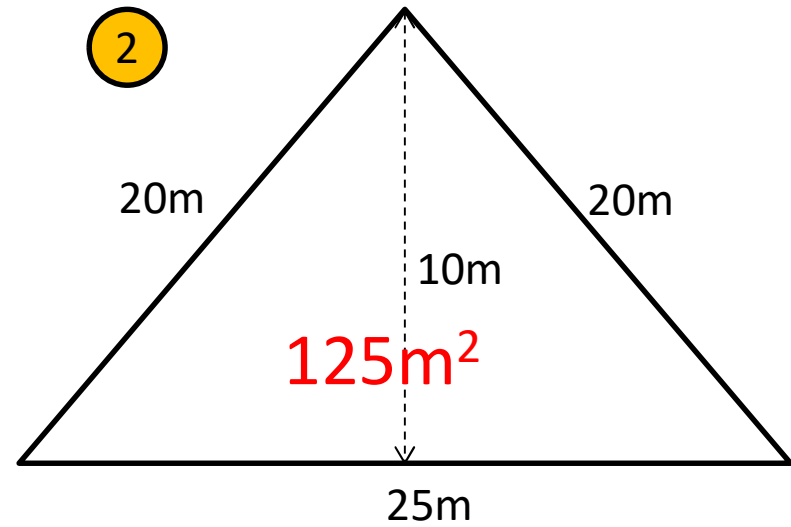


# Area of Triangles

1



2



3

