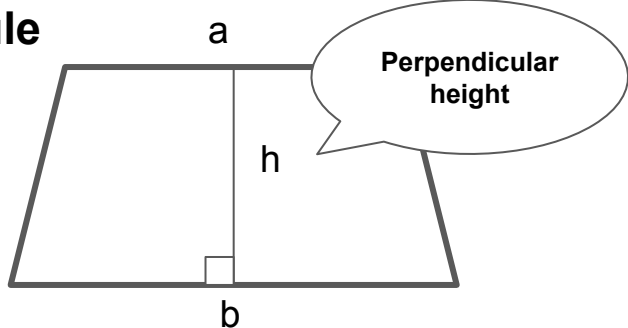




# Area of a trapezium: minimally different questions

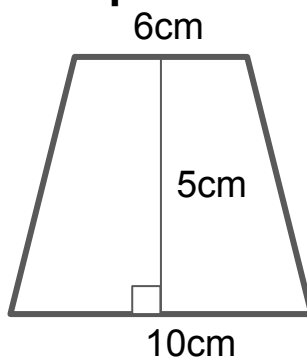
## The rule



$$\text{Area} = \frac{1}{2} \times (a + b) \times h$$

*a & b are parallel sides*

## Example



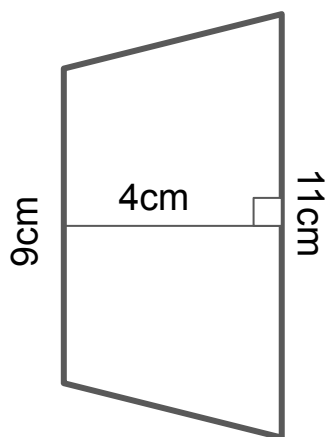
### Area

$$\begin{aligned} &= \frac{1}{2} \times (6 + 10) \times 5 \\ &= \frac{1}{2} \times 16 \times 5 \\ &= 40 \text{ cm}^2 \end{aligned}$$

1.

### Area

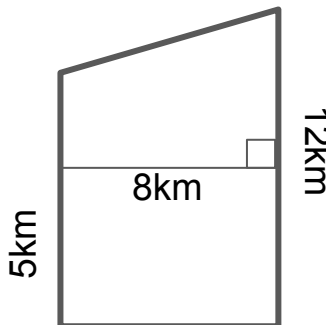
$$\begin{aligned} &= \frac{1}{2} \times (9 + 11) \times 4 \\ &= \frac{1}{2} \times 20 \times 4 \\ &= \text{___} \text{ cm}^2 \end{aligned}$$



2.

### Area

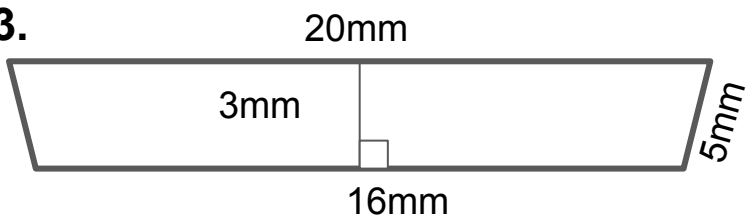
$$\begin{aligned} &= \frac{1}{2} \times (5 + 12) \times 8 \\ &= \frac{1}{2} \times \text{___} \times 8 \\ &= \text{___} \text{ km}^2 \end{aligned}$$



3.

### Area

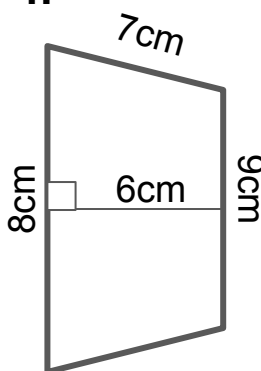
$$\begin{aligned} &= \frac{1}{2} \times (20 + 16) \times 3 \\ &= \frac{1}{2} \times \text{___} \times \text{___} \\ &= \text{___} \text{ mm}^2 \end{aligned}$$



4.

### Area

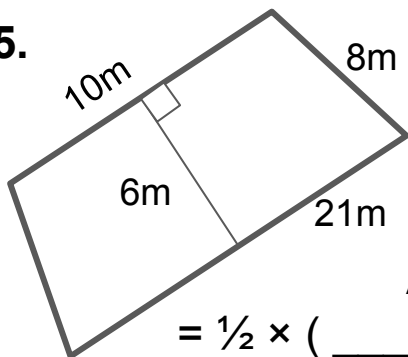
$$\begin{aligned} &= \frac{1}{2} \times (8 + 9) \times \text{___} \\ &= \frac{1}{2} \times \text{___} \times \text{___} \\ &= \text{___} \text{ cm}^2 \end{aligned}$$



5.

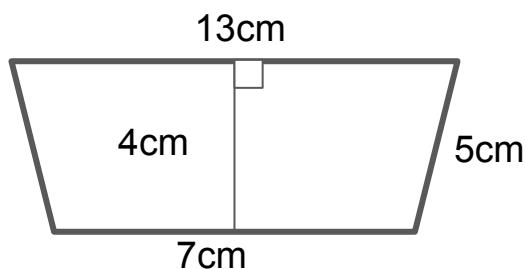
### Area

$$\begin{aligned} &= \frac{1}{2} \times (\text{___} + \text{___}) \times \text{___} \\ &= \frac{1}{2} \times \text{___} \times \text{___} \\ &= \text{___} \text{ m}^2 \end{aligned}$$



6.

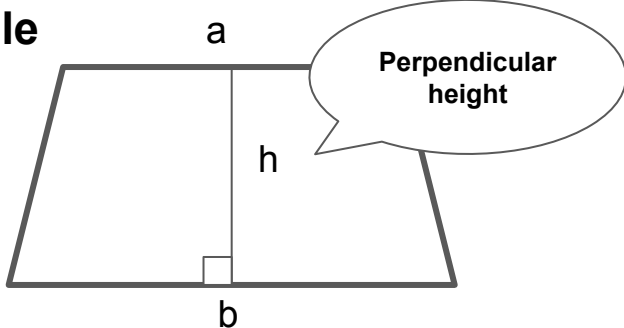
### Find the area





# Area of a trapezium: minimally different questions

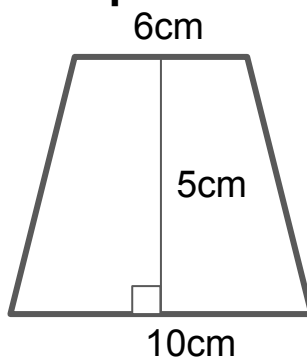
## The rule



$$\text{Area} = \frac{1}{2} \times (a + b) \times h$$

*a & b are parallel sides*

## Example



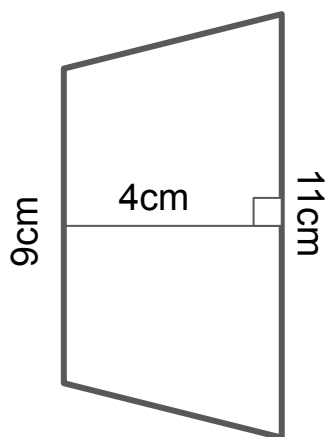
### Area

$$\begin{aligned} &= \frac{1}{2} \times (6 + 10) \times 5 \\ &= \frac{1}{2} \times 16 \times 5 \\ &= 40 \text{ cm}^2 \end{aligned}$$

1.

### Area

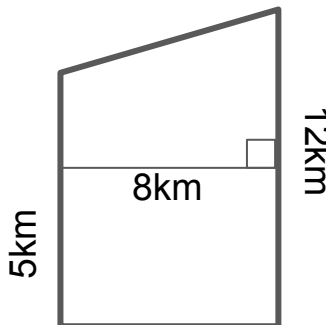
$$\begin{aligned} &= \frac{1}{2} \times (9 + 11) \times 4 \\ &= \frac{1}{2} \times 20 \times 4 \\ &= \mathbf{40 \text{ cm}^2} \end{aligned}$$



2.

### Area

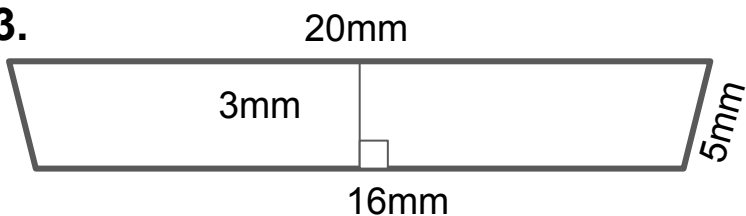
$$\begin{aligned} &= \frac{1}{2} \times (5 + 12) \times 8 \\ &= \frac{1}{2} \times \mathbf{17} \times 8 \\ &= \mathbf{68 \text{ km}^2} \end{aligned}$$



3.

### Area

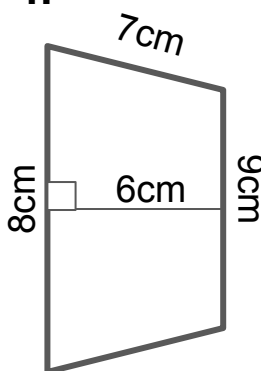
$$\begin{aligned} &= \frac{1}{2} \times (20 + 16) \times 3 \\ &= \frac{1}{2} \times \mathbf{36} \times \mathbf{3} \\ &= \mathbf{54 \text{ mm}^2} \end{aligned}$$



4.

### Area

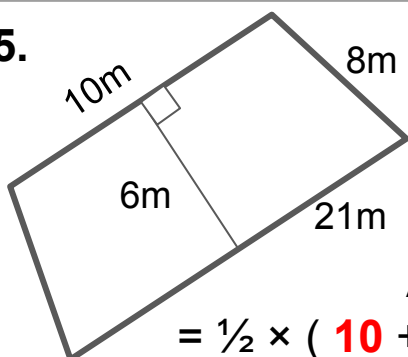
$$\begin{aligned} &= \frac{1}{2} \times (8 + 9) \times \mathbf{6} \\ &= \frac{1}{2} \times \mathbf{17} \times \mathbf{6} \\ &= \mathbf{51 \text{ cm}^2} \end{aligned}$$



5.

### Area

$$\begin{aligned} &= \frac{1}{2} \times (\mathbf{10} + \mathbf{21}) \times \mathbf{6} \\ &= \frac{1}{2} \times \mathbf{31} \times \mathbf{6} \\ &= \mathbf{93 \text{ m}^2} \end{aligned}$$



6.

### Area

$$\begin{aligned} &= \frac{1}{2} \times (\mathbf{7} + \mathbf{13}) \times \mathbf{4} \\ &= \frac{1}{2} \times \mathbf{20} \times \mathbf{4} \\ &= \mathbf{40 \text{ cm}^2} \end{aligned}$$

