

# Outcome 1 - Area of 2D Shapes

## Formulae Sheet

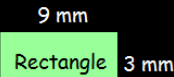
Trapezium:  
 $A = \frac{1}{2} \times (A + B) \times h$   
 • + the two parallel sides  
 •  $\times$  by height  
 •  $\div$  answer by 2

### Bronze examples

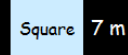
Examples...

**\*\*Times it!\*\***

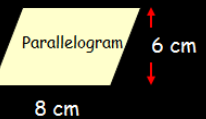
Calculate the area of...



$$A = 9 \times 3 = 27 \text{ mm}^2$$



$$A = 7 \times 7 = 49 \text{ m}^2$$



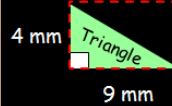
$$A = 8 \times 6 = 48 \text{ cm}^2$$

### Silver examples

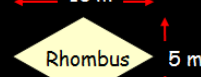
Examples...

**\*\*Times it and half it!\*\***

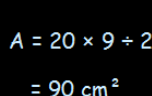
Calculate the area of...



$$A = 9 \times 4 \div 2 = 18 \text{ mm}^2$$



$$A = 10 \times 5 \div 2 = 25 \text{ m}^2$$



$$A = 20 \times 9 \div 2 = 90 \text{ cm}^2$$

### Gold example

Examples...

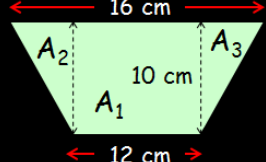
1. Get area of rectangle

2. Get area of triangle

3. Get area of second triangle

4. Add them together

Calculate the area of...



$$A_1 = 12 \times 10 = 120 \text{ cm}^2 \quad (16 - 12) \div 2$$

$$A_2 = 10 \times 2 \div 2 = 10 \text{ cm}^2$$

$$A_3 = 10 \times 2 \div 2 = 10 \text{ cm}^2$$

$$\text{Total Area} = 120 + 10 + 10 = 140 \text{ cm}^2$$

## Formulae Sheet

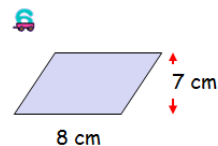
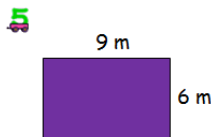
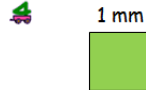
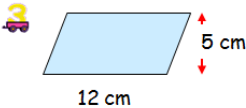
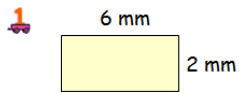
Rectangle:  
 $A = L \times B$   
 Square:  
 $A = L^2$   
 Parallelogram:  
 $A = B \times H$

## Formulae Sheet

Triangle:  
 $A = \frac{1}{2} \times B \times H$   
 Rhombus:  
 $A = \frac{1}{2} \times D \times d$   
 Kite:  
 $A = \frac{1}{2} \times D \times d$

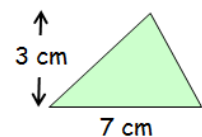
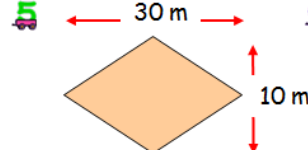
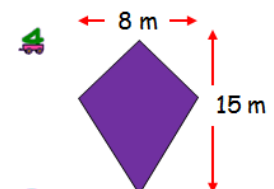
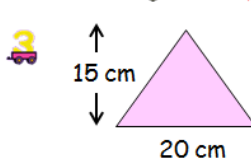
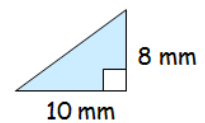
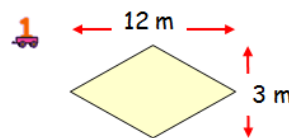
### Bronze Questions

Calculate the areas of the following shapes...



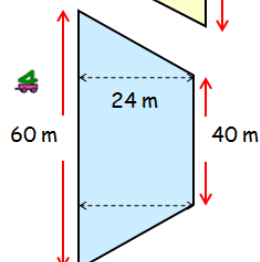
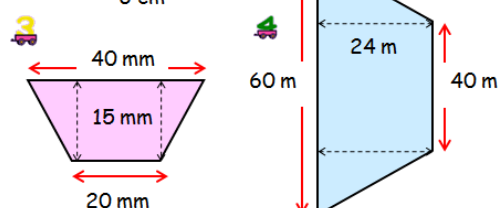
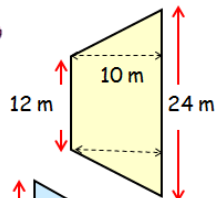
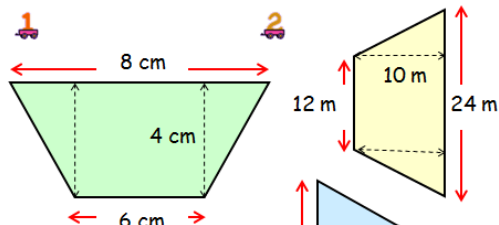
### Silver Questions

Calculate the areas of the following shapes...



### Gold Questions

Calculate the areas of the following trapeziums...



## Bronze Answers

- |                       |                       |
|-----------------------|-----------------------|
| 1. 12 mm <sup>2</sup> | 2. 400 m <sup>2</sup> |
| 3. 60 cm <sup>2</sup> | 4. 1 mm <sup>2</sup>  |
| 5. 54 m <sup>2</sup>  | 6. 56 cm <sup>2</sup> |

## Silver Answers

- |                        |                         |
|------------------------|-------------------------|
| 1. 18 m <sup>2</sup>   | 2. 40 mm <sup>2</sup>   |
| 3. 150 cm <sup>2</sup> | 4. 60 m <sup>2</sup>    |
| 5. 150 m <sup>2</sup>  | 6. 10·5 cm <sup>2</sup> |

## Gold Answers

- |                        |                        |
|------------------------|------------------------|
| 1. 28 cm <sup>2</sup>  | 2. 180 m <sup>2</sup>  |
| 3. 450 mm <sup>2</sup> | 4. 1200 m <sup>2</sup> |