

**MATHS**

**YEAR 6**

**MEASUREMENT**

**NC. Objective:** To calculate the area of parallelograms and triangles.

1. The gardens of Bohemia are being redesigned for the Spring Festival.

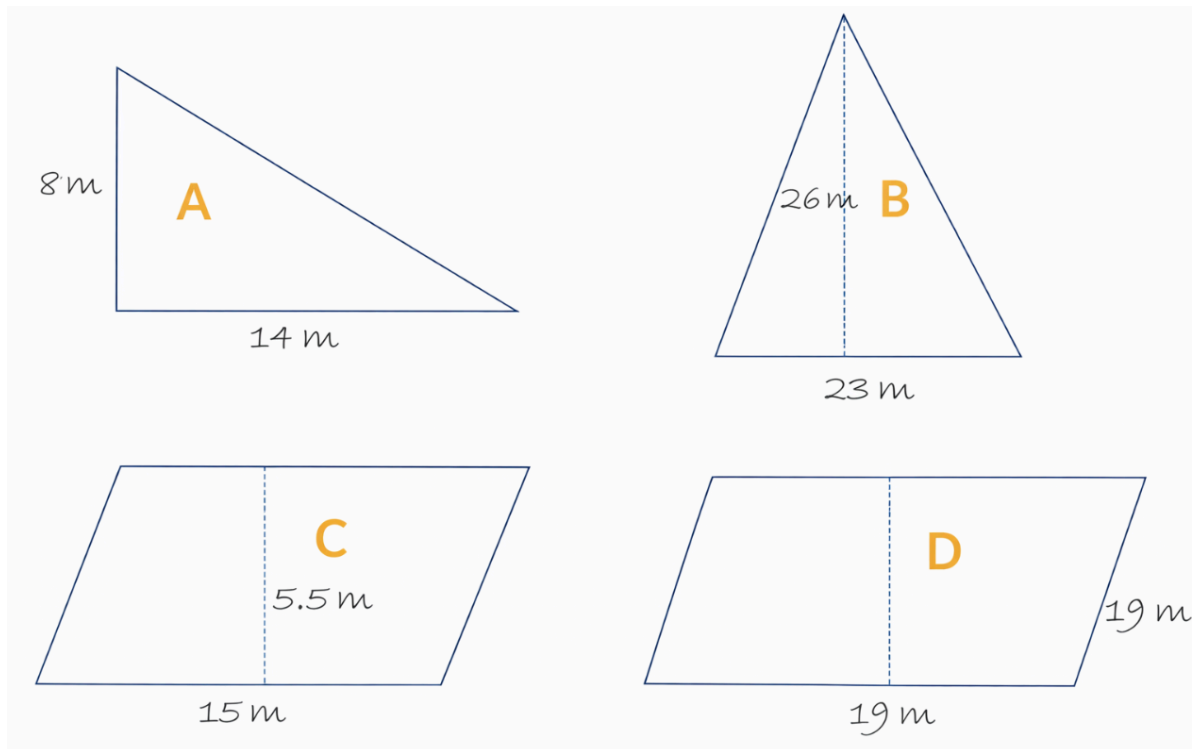
Florizel has drawn several possible flowerbed designs.

Each new flowerbed must not exceed  $180\text{m}^2$ .



a) Calculate the area of each design.

b) Write the letter of each shape in the correct column of the table.



Area below $50\text{m}^2$	Area $50\text{m}^2$ - $180\text{m}^2$	Area over $180\text{m}^2$

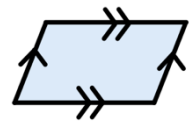
2. Hermione plans a parallelogram-shaped herb garden. The base is 15m and the vertical height is 5.5m.

- a) Calculate the area.  
b) The gardener spreads fertiliser at 1kg per 10m<sup>2</sup>. How many kilograms are needed?



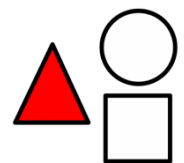
3. A large parallelogram display in the Royal Court has a base of 19m and a height of 13m.

- a) Find the area.  
b) If paving costs £4.00 per m<sup>2</sup>, how much will the paving cost in total?



4. A triangular stage is built for the Spring Festival. It has a base of 23m and a height of 26m.

- a) Find the area of the stage.  
b) If each 5m<sup>2</sup> needs 1 lantern, how many lanterns are required?



### CHALLENGE

Design a new flowerbed that has an area of exactly 36m<sup>2</sup> and is either:

- a triangle, or
- a parallelogram.

Clearly label the base and height. Show your calculation to prove the area is 36m<sup>2</sup>.

