
Parallelogram

This problem gives you the chance to:

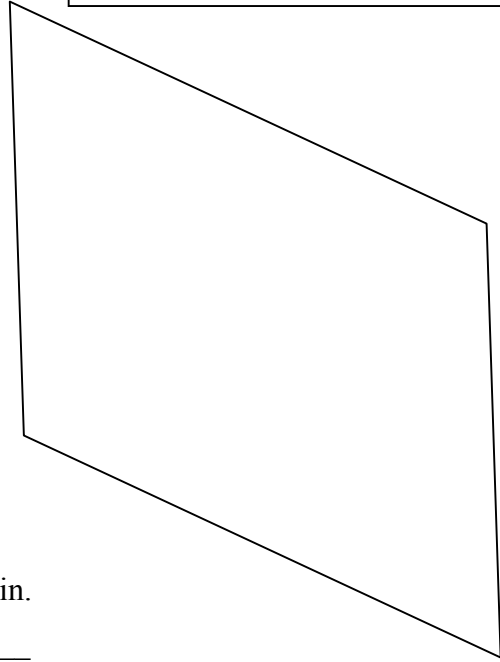
- use measurement to find the area and perimeter of shapes
-

1. This parallelogram is drawn accurately.

Make any measurements you need, in centimeters, and calculate:

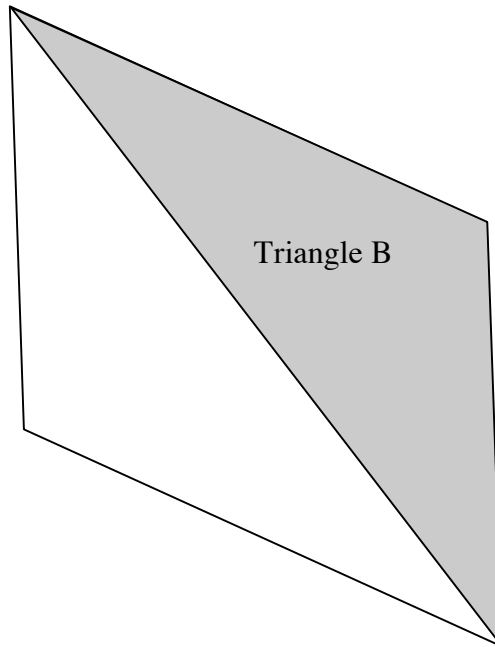
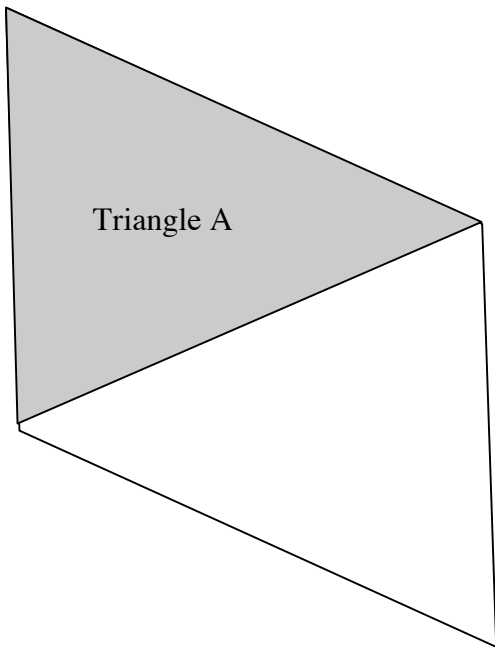
- a. The area of the parallelogram. _____
Show your calculations.
- b. The perimeter of the parallelogram. _____
Show your calculations.

The area of a parallelogram = base \times height



2. The diagram below shows the same parallelogram again.

- a. Find the area of Triangle A. _____
- b. Find the area of Triangle B. _____
- c. Explain how you found your answers. _____



3. Which triangle has a larger perimeter, Triangle A or Triangle B?

Explain how you can tell without measuring.

4. Sketch a right triangle with the same area as Triangle A.

Your diagram does not need to be accurate.

Show how you figured it out.

Task 4: Parallelogram	Rubric	
The core elements of performance required by this task are: • use measurement to find the area and perimeter of shapes Based on these, credit for specific aspects of performance should be assigned as follows	points	section points
1.a Gives correct answer in the range 33-39 square centimeters. Shows correct work such as: 7×5 or 6×6 . Accept reasonable measurements shown on diagram. b Gives correct answer in the range 24-28 centimeters and shows work such as $2(6 + 7)$. Accept reasonable measurements shown on diagram.	1 1 1	3
2.a Gives correct answer 17.5 square centimetres. Accept half of 1.a b Gives correct answer: 17.5 square centimetres. Accept half of 1.a c Gives correct explanation such as: They are both equal to half the area of the parallelogram	1ft 1ft 1	3
3. Gives correct answer such as: Triangle B: both triangles have sides that match the two sides of the parallelogram. The third side of B is longer than the third side of A.	1	1
4. Sketches a correct triangle and shows correct work such as: The area of the triangle = $\frac{1}{2}$ base x height = 17.5. base x height = 35 So if the base = 7 cm then the height = 5 cm	2ft	2
Note: Deduct 1 point for missing or incorrect units. (Need to show some evidence that area is measured in square units and that perimeter is a linear measure.		
Total Points		9