

# Geometry 1F Assessment

Foundation Level



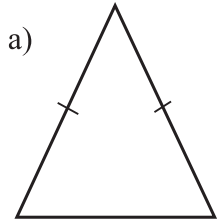
All questions

Clip	Grade	Title of clip	Question(s)	Marked out of	Score	%
9.....	1.....	Simple Geometric Definitions .....	1	4	___	___
10.....	1.....	Polygons. ....	2, 3	5	___	___
11.....	1.....	Symmetries .....	4	6	___	___
12.....	1.....	Tessellations and Congruency .....	5, 6	5	___	___
13.....	1.....	Names of Angles . . . . .	7	2	___	___
43.....	2.....	Properties of Solids. ....	8	5	___	___
44.....	2.....	Nets .....	9	3	___	___
45.....	2.....	Angles on a Line and at a Point. ....	10	4	___	___
46.....	2.....	Measuring and Drawing Angles .....	11	2	___	___
47.....	2.....	Drawing a Triangle Using a Protractor .....	12	3	___	___
48.....	2.....	Reflections .....	13	2	___	___
49.....	2.....	Rotations .....	13	2	___	___
50.....	2.....	Translations .....	13	2	___	___
51.....	2.....	Plans and Elevations .....	14	4	___	___
52.....	2.....	Perimeters .....	15	3	___	___
53.....	2.....	Area of a Rectangle. ....	16	4	___	___
54.....	2.....	Area of a Triangle . . . . .	17	4	___	___
55.....	2.....	Area of a Parallelogram. ....	18	2	___	___
56.....	2.....	Area of a Trapezium .....	19	2	___	___
112.....	3.....	Metric Conversions. ....	20	3	___	___
113.....	3.....	Problems on Coordinate Axes .....	21	3	___	___
114.....	3.....	Surface Area of a Prism. ....	22	6	___	___
115.....	3.....	Volume of a Cuboid .....	23	2	___	___
116.....	3.....	Circle Definitions. ....	24	2	___	___

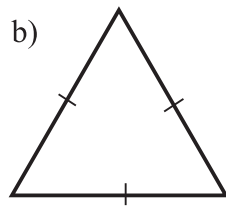
*Out of 80*      TOTAL SCORE \_\_\_\_\_

Final Percentage  %

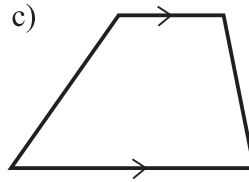
1) Name each of the following shapes:



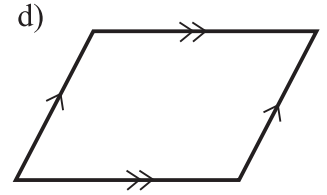
\_\_\_\_\_ 1  
\_\_\_\_\_



\_\_\_\_\_ 1  
\_\_\_\_\_

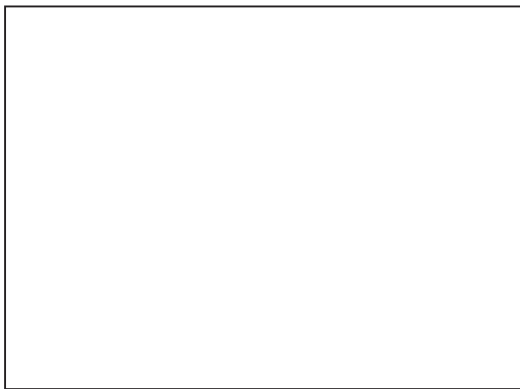


\_\_\_\_\_ 1

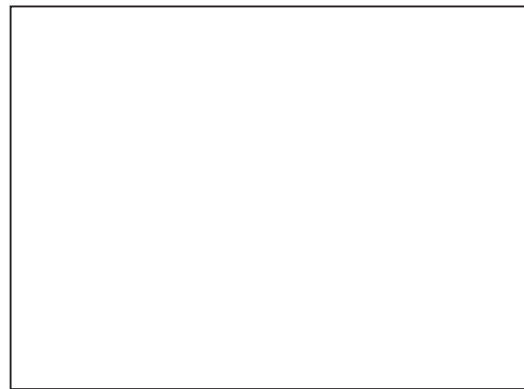


\_\_\_\_\_ 1

2) a) In the box, below, draw a hexagon. 1



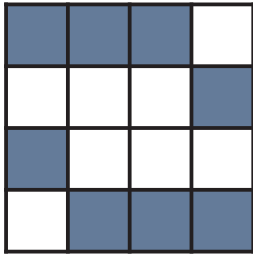
b) In the box, below, draw an octagon. 1



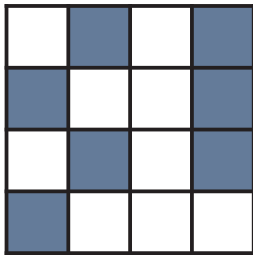
3) a) In the space, below, draw a sketch of a **regular** pentagon. 2

b) In a regular pentagon, what is special about the angles? \_\_\_\_\_ 1

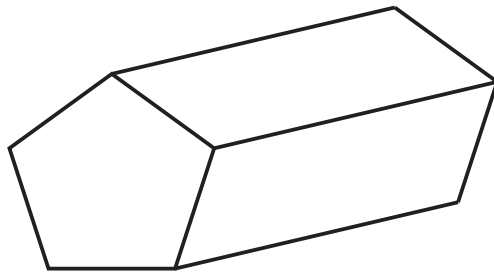
4) a) What is the order of rotational symmetry of this shape? \_\_\_\_\_ 2



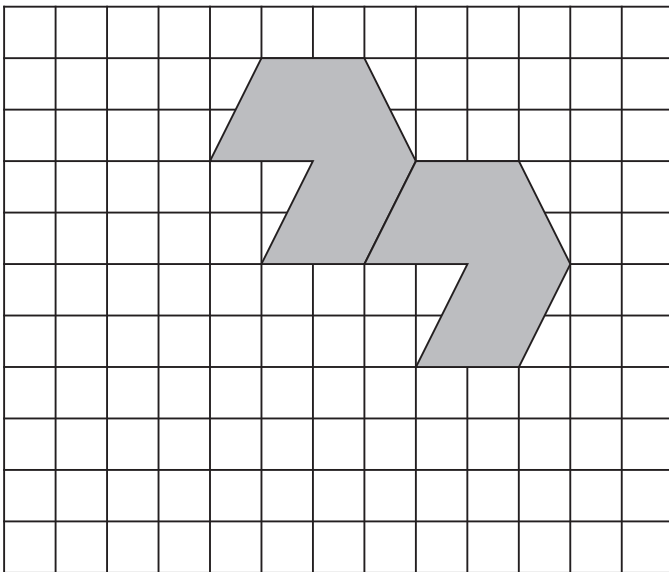
b) Shade exactly **two** squares to make this shape have **one** line of symmetry. 2



c) Draw one plane of symmetry on this shape. 2

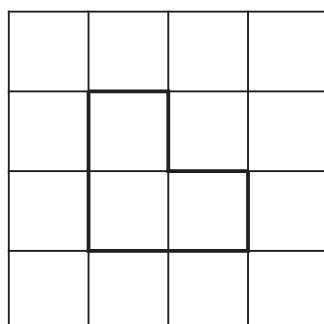


5) This pattern shows part of a tessellation.



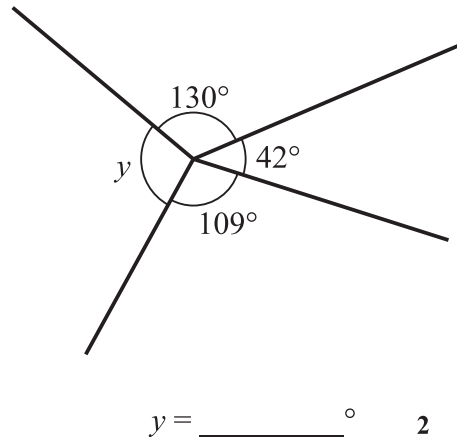
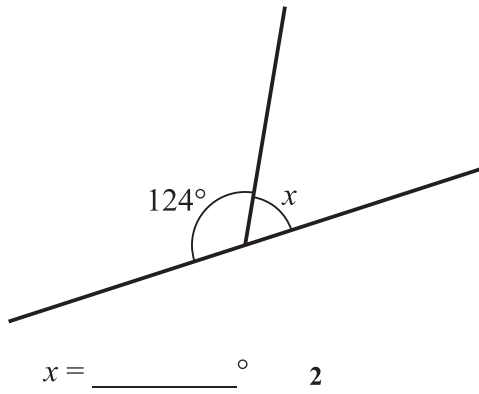
Extend the tessellation by drawing four more unit shapes within the grid. 3

6) Draw one straight line on the L-shape to make two congruent shapes. 2

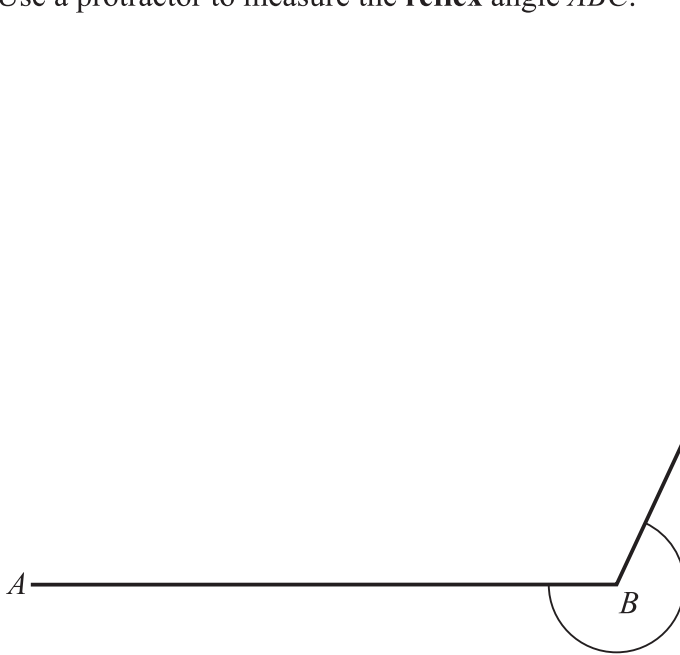




10) Work out the size of angles  $x$  and  $y$ .

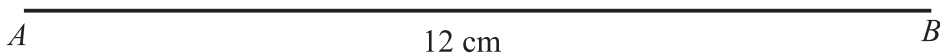


11) Use a protractor to measure the **reflex** angle  $ABC$ .

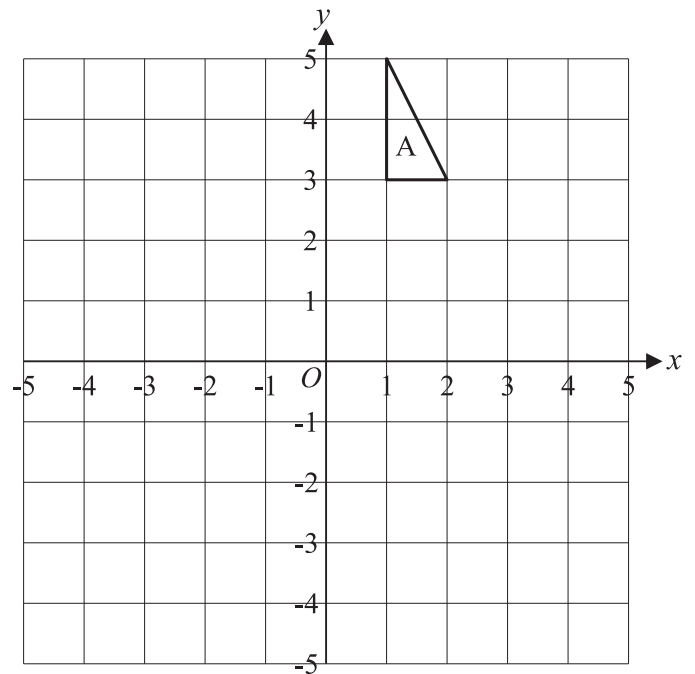


Reflex angle  $ABC$  is  $\underline{\hspace{2cm}}^\circ$     **2**

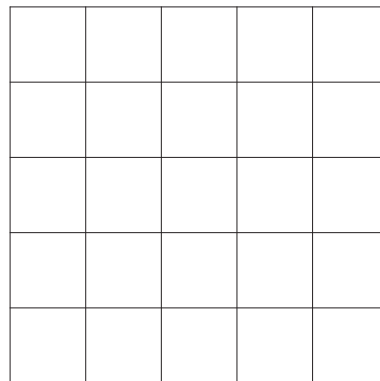
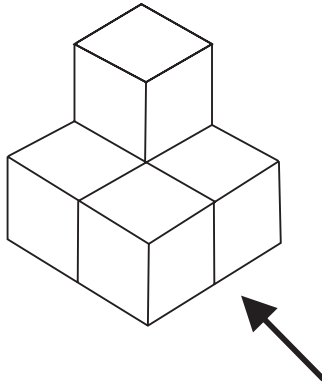
12) Draw triangle  $ABC$  where  $AB$  is 12 cm, angle  $ABC$  is  $115^\circ$  and angle  $BAC$  is  $25^\circ$ .  
Line  $AB$  has been drawn for you.    **3**



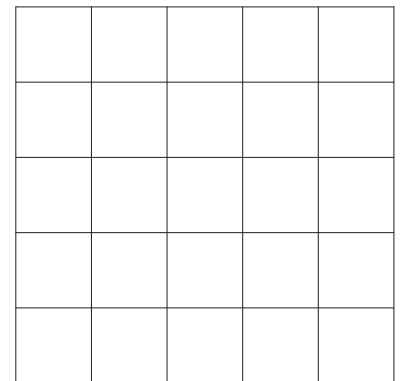
- 13) a) Reflect triangle A in the line  $y = x$  and label it B. 2
- b) Rotate triangle A  $90^\circ$  anti-clockwise centre  $(1, 0)$  and label it C. 2
- c) Translate triangle A by vector  $\begin{bmatrix} 2 \\ -5 \end{bmatrix}$  and label it D. 2



- 14) This solid object is made from five identical cm square cubes.




Elevation

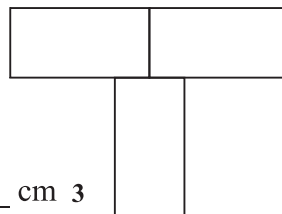


Plan

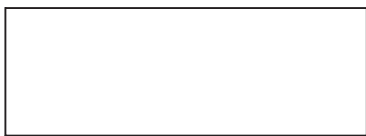
- a) Draw the elevation of the object on the cm square grid from the direction marked with the arrow. 2
- b) Draw the plan of the solid object on the cm square grid. 2

- 15) Three rectangles like this  3 cm  
6 cm

are put together to make this shape.  $\longrightarrow$



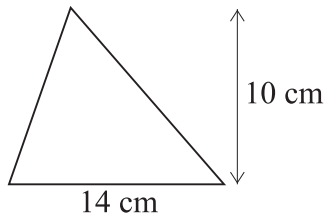
What is the perimeter of the shape? \_\_\_\_\_ cm 3

- 16) a) What is the area of this rectangle? \_\_\_\_\_  $\text{cm}^2$  2  3 cm  
8 cm

- b) If a rectangle has an area of  $90 \text{ cm}^2$  and a length of 20 cm, what is the width of the rectangle? \_\_\_\_\_ cm 2

17) a) Find the area of this triangle

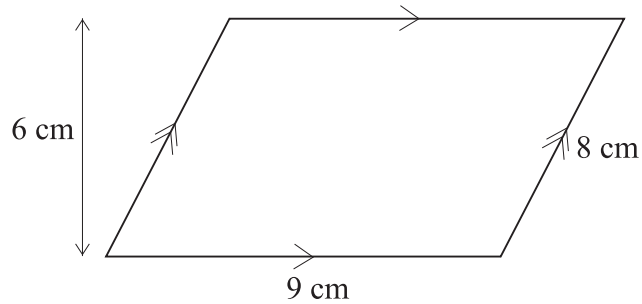
Area is \_\_\_\_\_  $\text{cm}^2$     2



b) If the base of a triangle has a length of 12 cm and an area of  $60 \text{ cm}^2$  what is its height? \_\_\_\_\_ cm    2

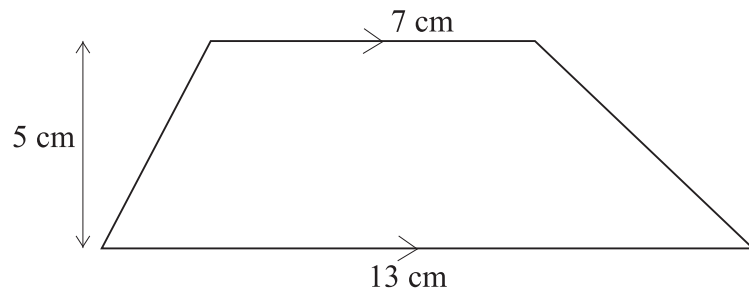
18) Find the area of this parallelogram.

Area is \_\_\_\_\_  $\text{cm}^2$     2



19) Find the area of this trapezium.

Area is \_\_\_\_\_  $\text{cm}^2$     2



20) a) Change 405 cm to metres. \_\_\_\_\_ m    1

b) Change 2.3 kg to grams. \_\_\_\_\_ g    1

c) Change  $4560 \text{ cm}^3$  to litres. \_\_\_\_\_ l    1

21) The diagram shows three vertices of a parallelogram.

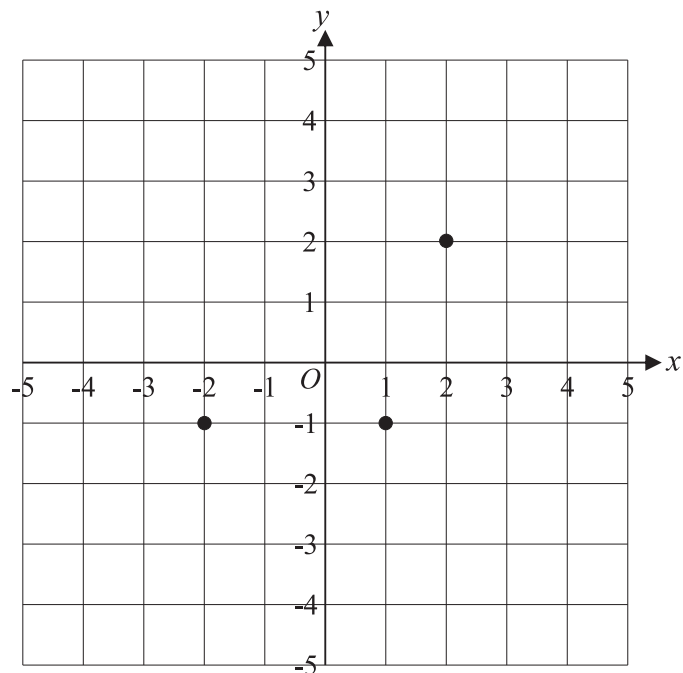
The fourth vertex can be in one of three possible places.

What are the coordinates of the three places?

Possibility 1: \_\_\_\_\_    1

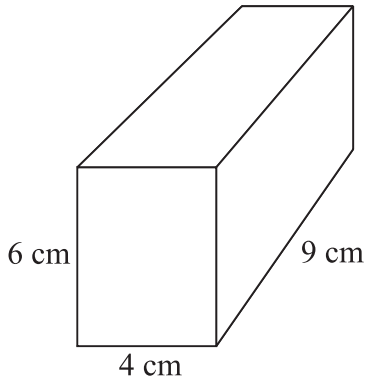
Possibility 2: \_\_\_\_\_    1

Possibility 3: \_\_\_\_\_    1



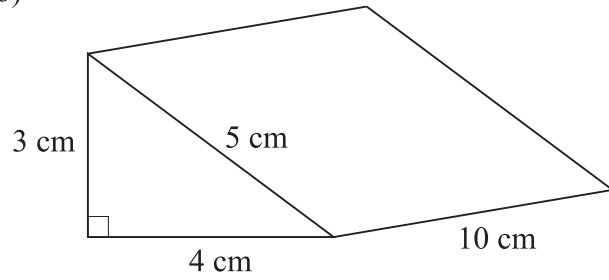
22) Below you will see a cuboid and a triangular prism.  
Find the total surface area of each of them.

a)



Total surface area = \_\_\_\_\_  $\text{cm}^2$     3

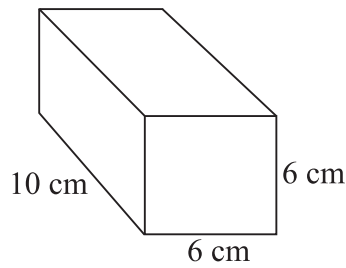
b)



Total surface area = \_\_\_\_\_  $\text{cm}^2$     3

23) What is the volume of this cuboid?

Volume is \_\_\_\_\_  $\text{cm}^3$     2



24) Fill in the blanks

a) Line A is a \_\_\_\_\_ of the circle.    1

b) Line B is a \_\_\_\_\_ of the circle.    1

