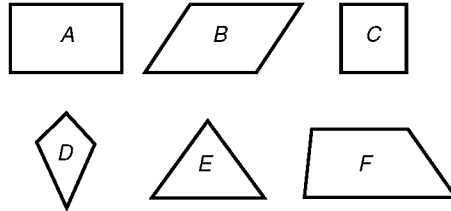
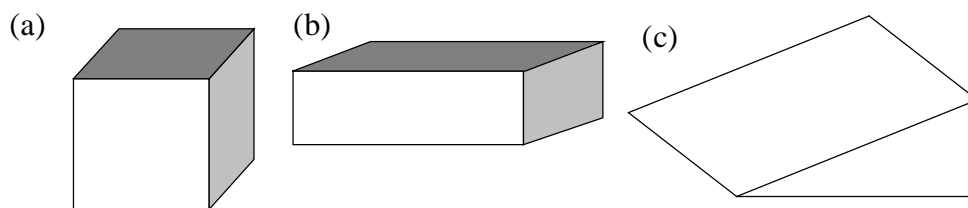


## Topical Test Paper F3 : Shape and Space

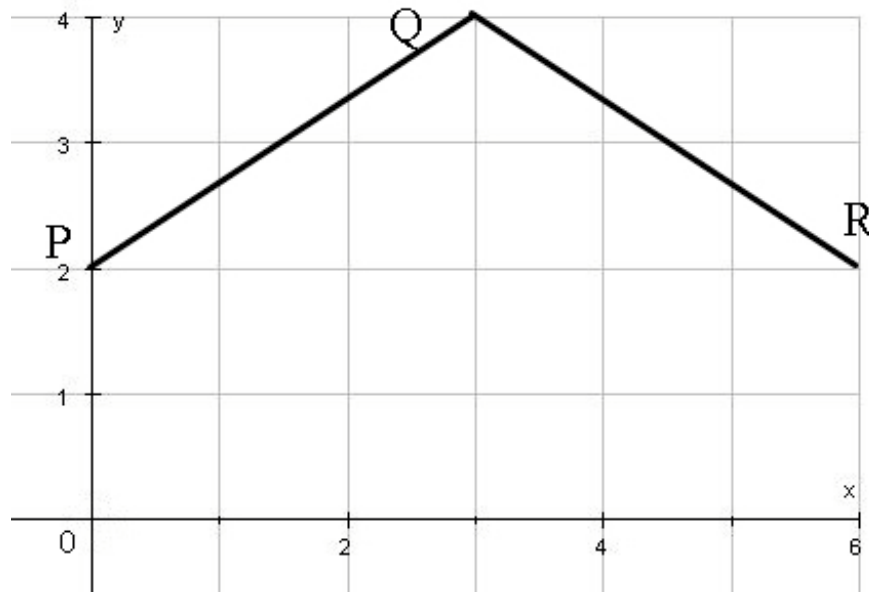
1. Explain how shape *E* is different from the other shapes.



2. Write down the mathematical name of each of the following solid shapes.

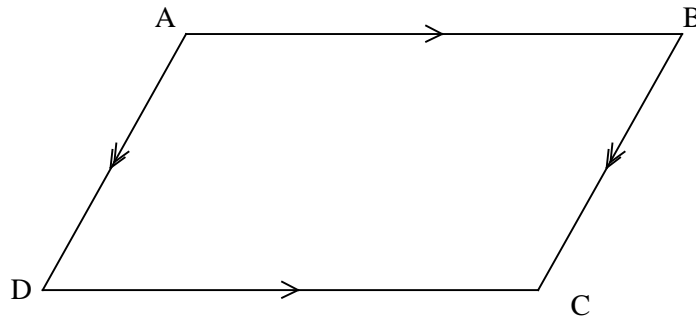


3.



- (a) Measure and write down the size of angle Q
- (b) Write down the coordinates of the points
  - (i) P
  - (ii) Q
- (c) Plot the point S (3,0). Join S to R and to P.
- (d) Write down the name of the shape PQRS

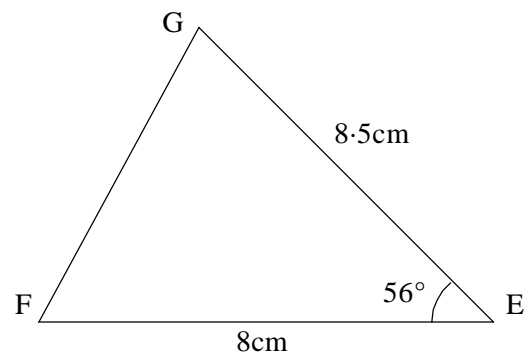
4.



- Write down the name of the shape above.
- Measure and write down the size of angle D.
- Write down the size of angle B.
- Work out the size of angle A.
- What sort of angle is angle A?
- Measure and write down the length of side BC.

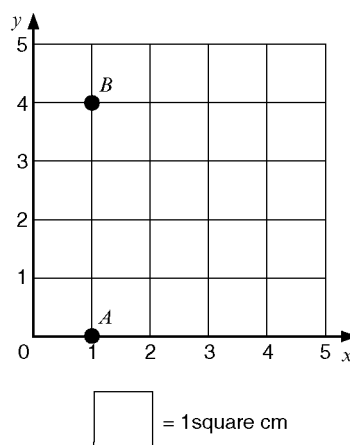
5. Here is a sketch of a triangle. It is **NOT** accurately drawn

EF = 8cm  
EG = 8.5cm  
Angle E =  $56^\circ$

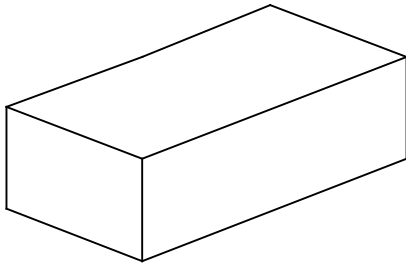


- Make an accurate drawing of the triangle.
- Measure the size of angle G on your accurate drawing.
- Measure the length of side FG on your accurate drawing.

6. (a) Write down the co-ordinates of the point
- A
  - B
- (b) On the grid plot and label the points C (3, 4) and D (3, 2).
- (c) Join the four points, A, B, C and D in order with straight lines. Write down the name of the shape that is made.

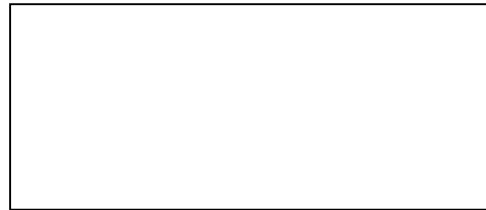


7.



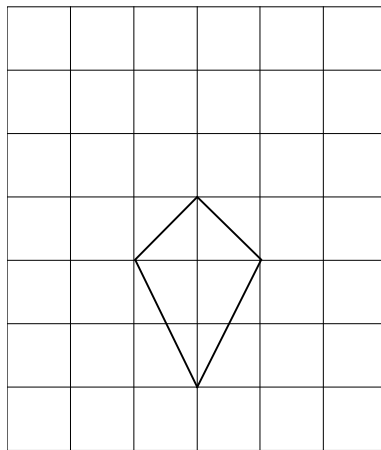
Draw in one plane of symmetry on this shape.

8. (a) Draw in all the lines of symmetry for this rectangle.



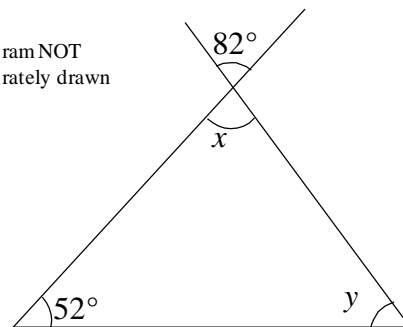
(b) Write down the name of a four sided shape that has rotational symmetry of order 4.

9. On the grid show how this kite will tessellate. You should draw at least 6 kites.



10. (a) Work out the value of  $x$  in the diagram below. Give a reason for your answer.  
 (b) Work out the value of  $y$ . Give a reason for your answer.

Diagram NOT accurately drawn



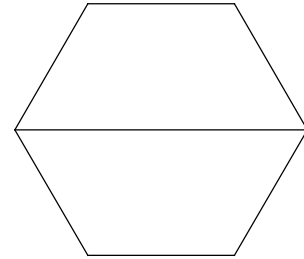
11. Draw the line(s) of symmetry on each of the road signs below which have line symmetry.



12. Under each of the shapes below that have rotational symmetry, write the order of rotational symmetry. If a shape does not have rotational symmetry, write 'none'

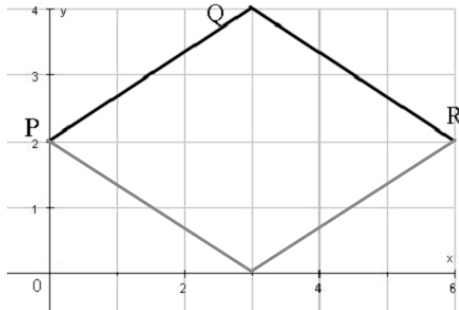


13. The diagram shows the top view of two identical tables joined together to make a larger table.
- (a) Write down the name of the shape formed by the two tables.
- (b) Show how the two tables can be joined to make a parallelogram.

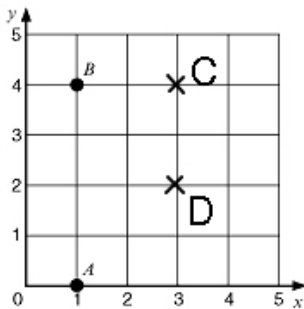


### F3 : Shape and Space

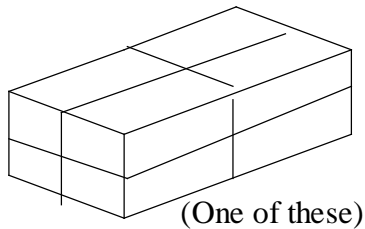
1. E has only 3 sides.
2. (a) Cube (b) Cuboid  
(c) Triangular Prism
3. (a)  $73^\circ$  (b)(i) (0,2) (ii) (3,4)  
(c)



- (d) Rhombus
4. (a) parallelogram (b)  $61^\circ$  (c)  $61^\circ$   
(d)  $119^\circ$  (e) obtuse (f) 3.9cm
5. (b)  $59^\circ$  (c) 7.8cm
6. (a) i) (1,0) ii) (1,4)  
(b) (c) trapezium



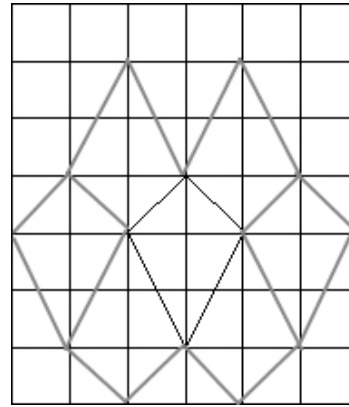
7.



8.



9.



10. (a)  $82^\circ$  opposite angle.  
(b)  $y = 180 - (52 + 82) = 46^\circ$

11.



12. 2, 2, 4, none, 3, none

13. (a) hexagon

(b)

