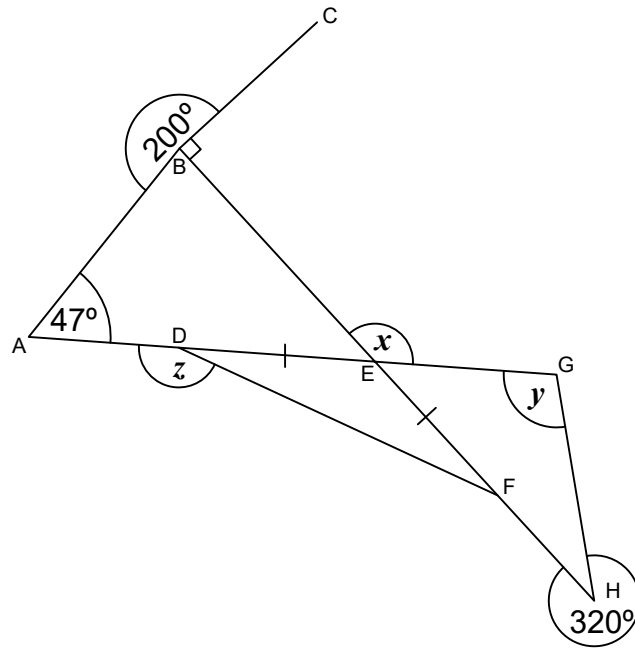
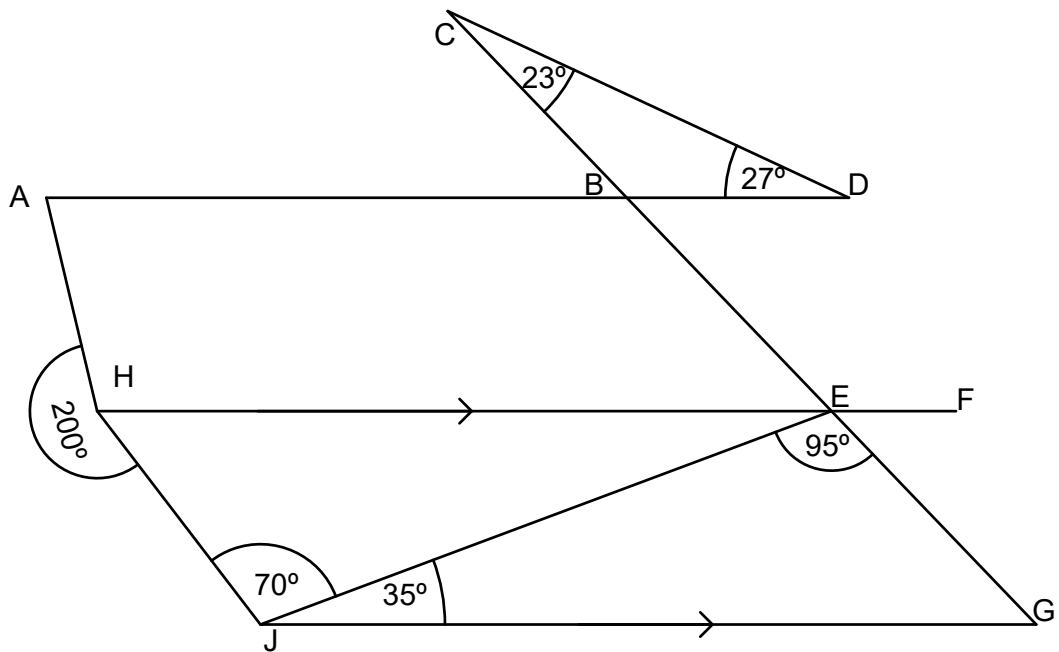


## Angles

- Find the value of  $x$ ,  $y$  and  $z$ . Give reasons.

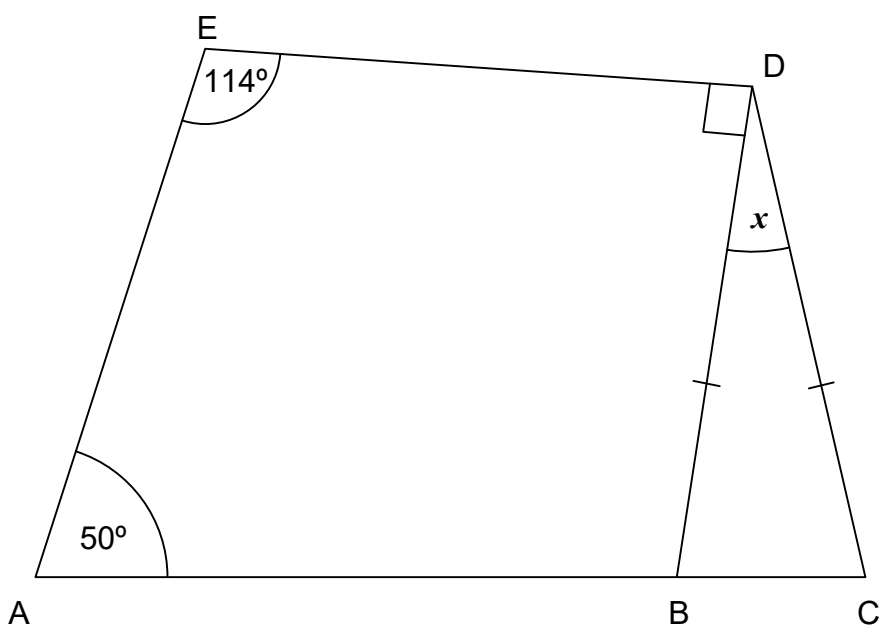


- Prove that ABEH is a trapezium given the information below. Include reasons.

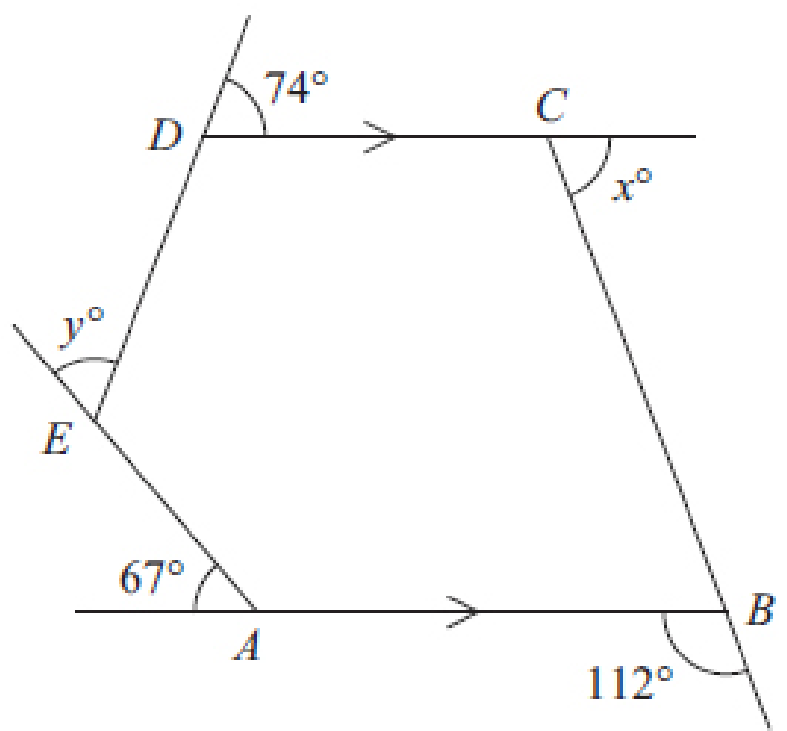


HF and JG are parallel.

3 Find the value of  $x$ . Give reasons.



4 Find the size of angle  $x$  and angle  $y$  below. Give reasons.



- 5 Calculate the exterior and interior angles of a regular icosagon.
- 6 The cube, tetrahedron, octahedron, dodecahedron and icosahedron are members of a special set of solids called the platonic solids. The thing that binds them is that they all have regular faces. Calculate the total number of degrees in each solid.

Information below should help you.

<b>Name of Solid</b>	<b>Number of Faces</b>	<b>Shape of each Face</b>
Tetrahedron	4	
Cube		
Octahedron		
Dodecahedron		Pentagon
Icosahedron	20	Triangle

- 7 Fill in the following table. Can you spot any pattern?

<b>Name of shape</b>	<b>Number of Faces</b>	<b>Number of Edges</b>	<b>Number of Vertices</b>
Tetrahedron			
Pentahedron			
Cube			
Octahedron			