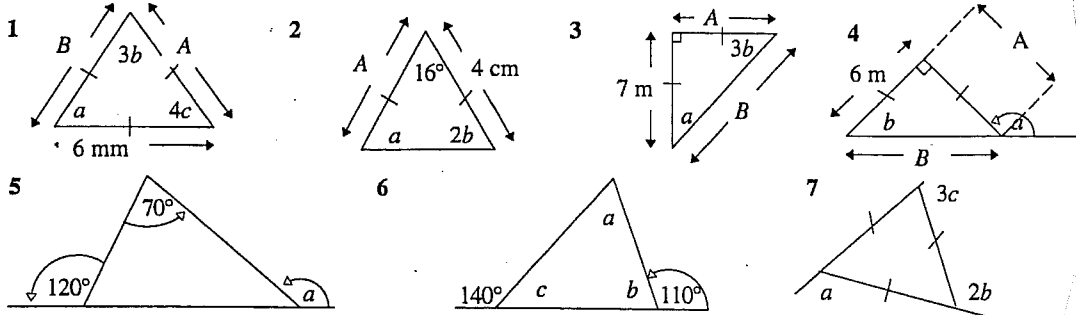


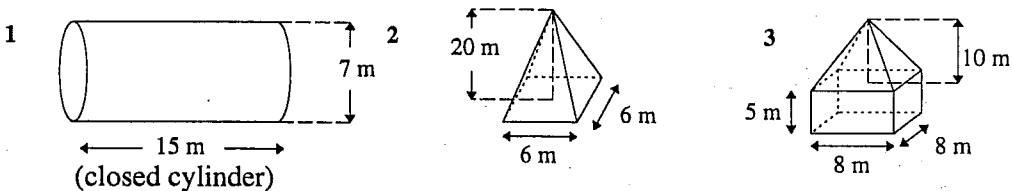
## A Geometry: Angles in triangles

Find the angles and side lengths in the following:



## B Geometry: Drawing accurate nets of solids

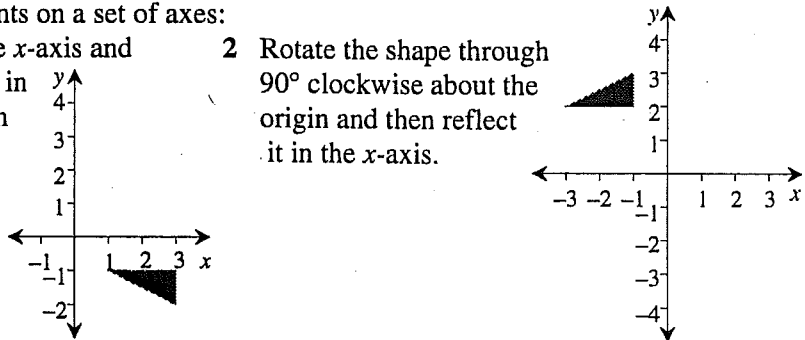
Draw accurate nets of these solids, showing all dimensions:



## C Geometry: Moving shapes – rotation, reflection and translation

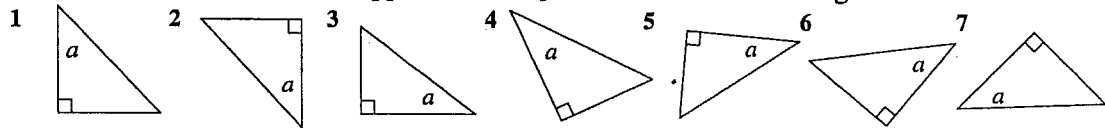
Show the following movements on a set of axes:

- Reflect the shape in the  $x$ -axis and then translate it 2 units in the positive direction of the  $y$ -axis.
- Rotate the shape through  $90^\circ$  clockwise about the origin and then reflect it in the  $x$ -axis.



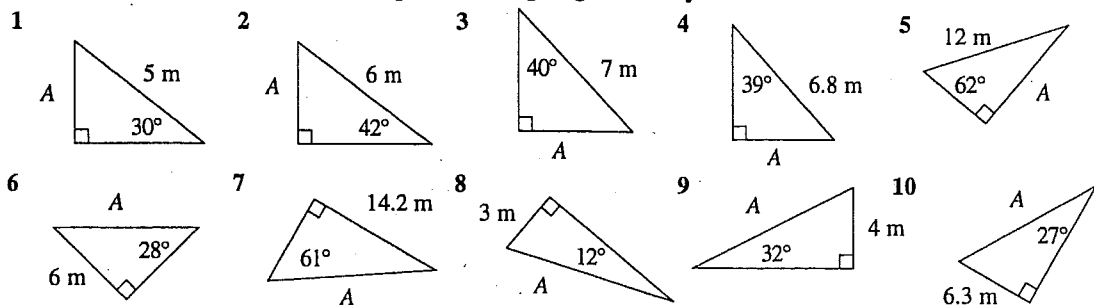
## D Trigonometry: The sides in a right-angled triangle

Identify the hypotenuse, and the opposite and adjacent sides in these triangles:



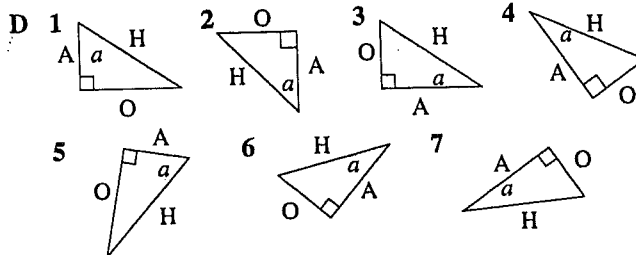
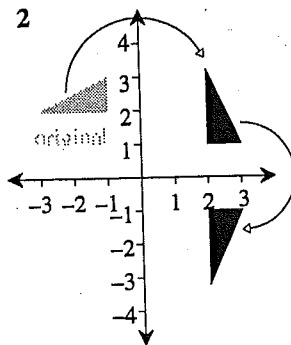
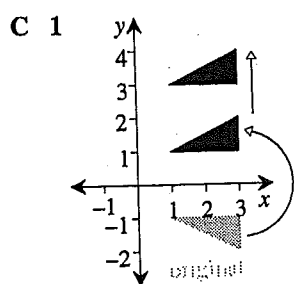
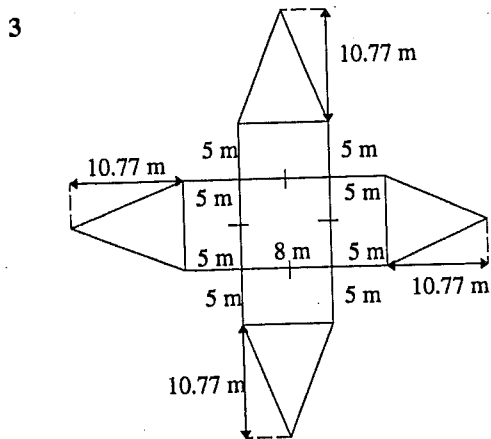
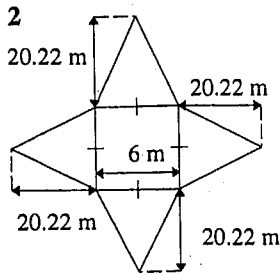
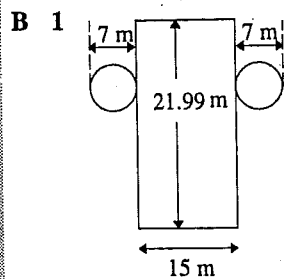
## E Trigonometry: Using sin to find side lengths

Find the labelled sides to 2 decimal places using trigonometry:



# Worksheet 27

- A**
- $a = 60^\circ, b = 20^\circ, c = 15^\circ, A = b = 6 \text{ mm}$
  - $a = 82^\circ, b = 41^\circ, A = 4 \text{ cm}$
  - $a = 45^\circ, b = 15^\circ, A = 7 \text{ m}, B = 9.9 \text{ m}$
  - $a = 135^\circ, b = 45^\circ, A = 6 \text{ m}, B = 8.5 \text{ m}$
  - $a = 130^\circ$
  - $a = 70^\circ, b = 70^\circ, c = 40^\circ$
  - $a = 120^\circ, b = 60^\circ, c = 40^\circ$



- E**
- |   |         |    |         |   |         |   |         |
|---|---------|----|---------|---|---------|---|---------|
| 1 | 2.5 m   | 2  | 4.01 m  | 3 | 4.50 m  | 4 | 4.28 m  |
| 5 | 10.60 m | 6  | 12.78 m | 7 | 16.24 m | 8 | 14.43 m |
| 9 | 7.55 m  | 10 | 3.88 m  |   |         |   |         |