Area of Irregular Shapes:

Working out problems from diagrams

Key Stage 2

Area of Irregular Shapes: Working out problems from diagrams

Calculate the area and the perimeter of the following shapes.

Use these steps to help you:

a. Draw a neat diagram;

b. Mark on all the dimensions you know;

c. See if you can work out any dimensions you don't know;

d. Calculate the perimeter;

e. Split the shape into sections;

f. Calculate the area of each section;

g. Find the total area;
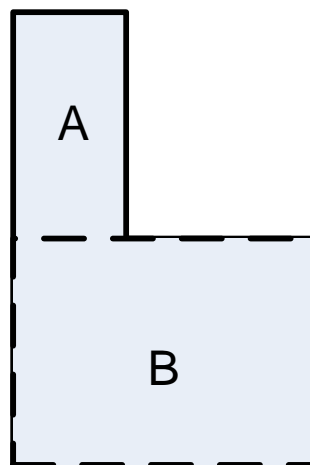
h. Write a sentence stating the answers to the question.

Hints:

Area of a rectangle = length × breadth

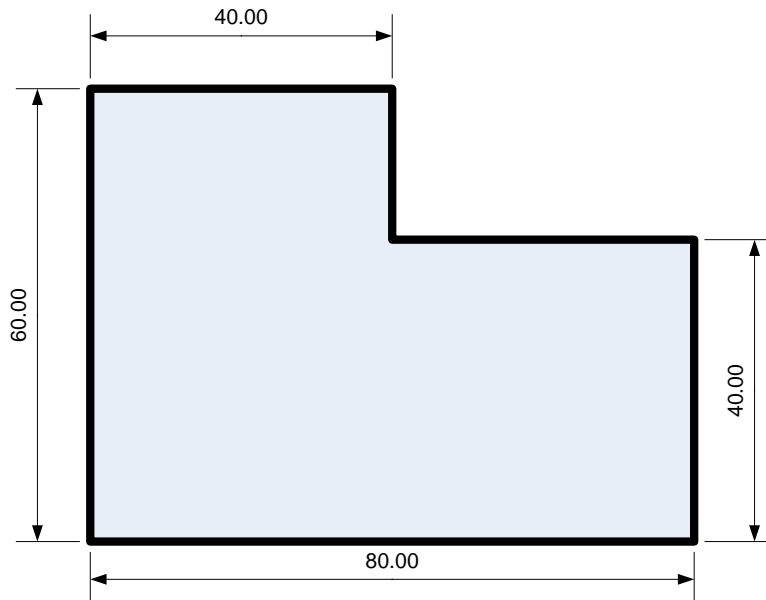Area of a triangle = ½ base × perpendicular height

Area of a circle = πr^2

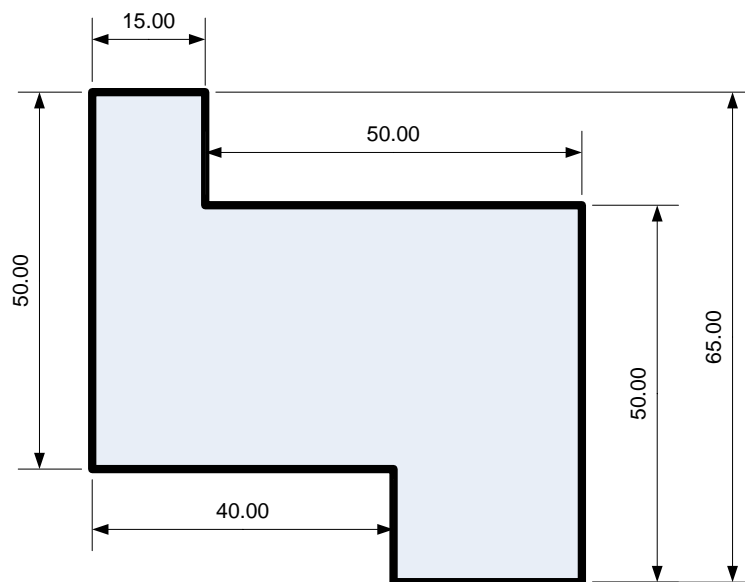Remember to split the area into parts and deal with one part at a time:

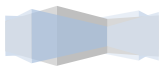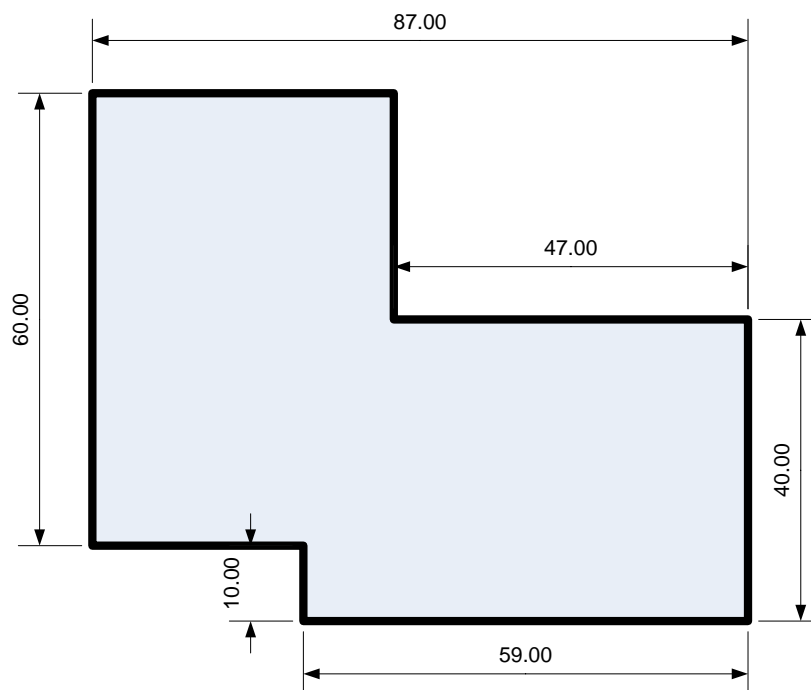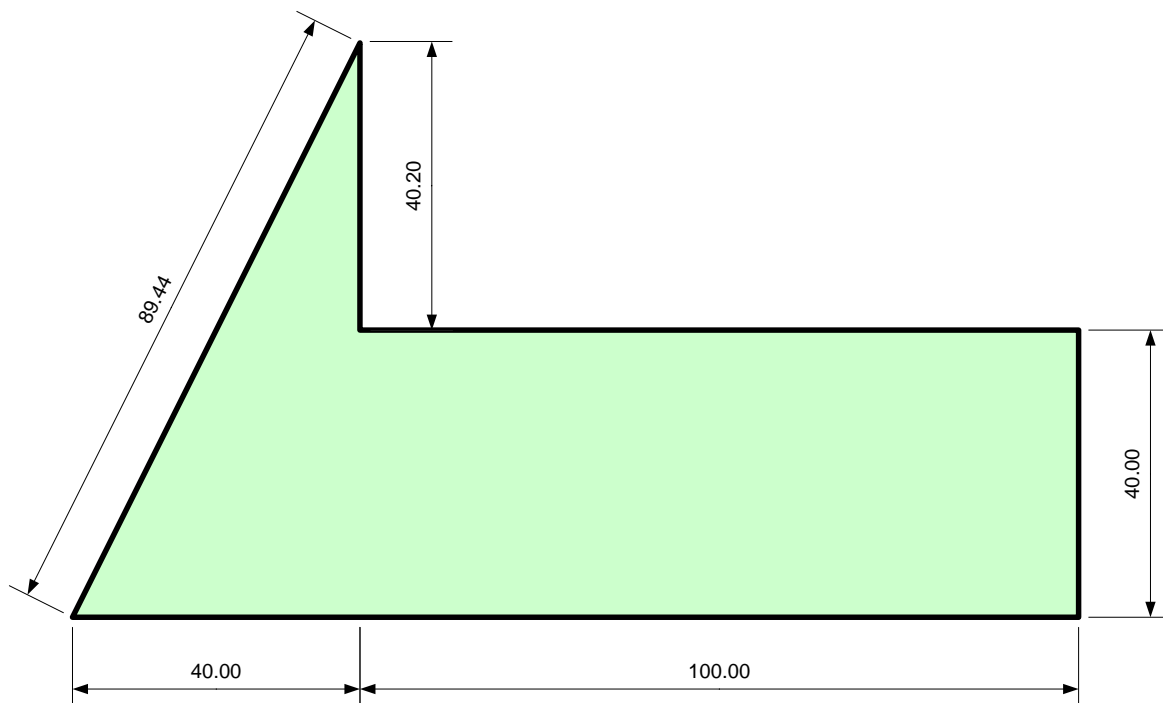# Area of Irregular Shapes: Working out problems from diagrams

1.

40.00

60.00

40.00

80.00

2.

15.00

50.00

50.00

65.00

50.00

40.00

Area of Irregular Shapes: Working out problems from diagrams

3.
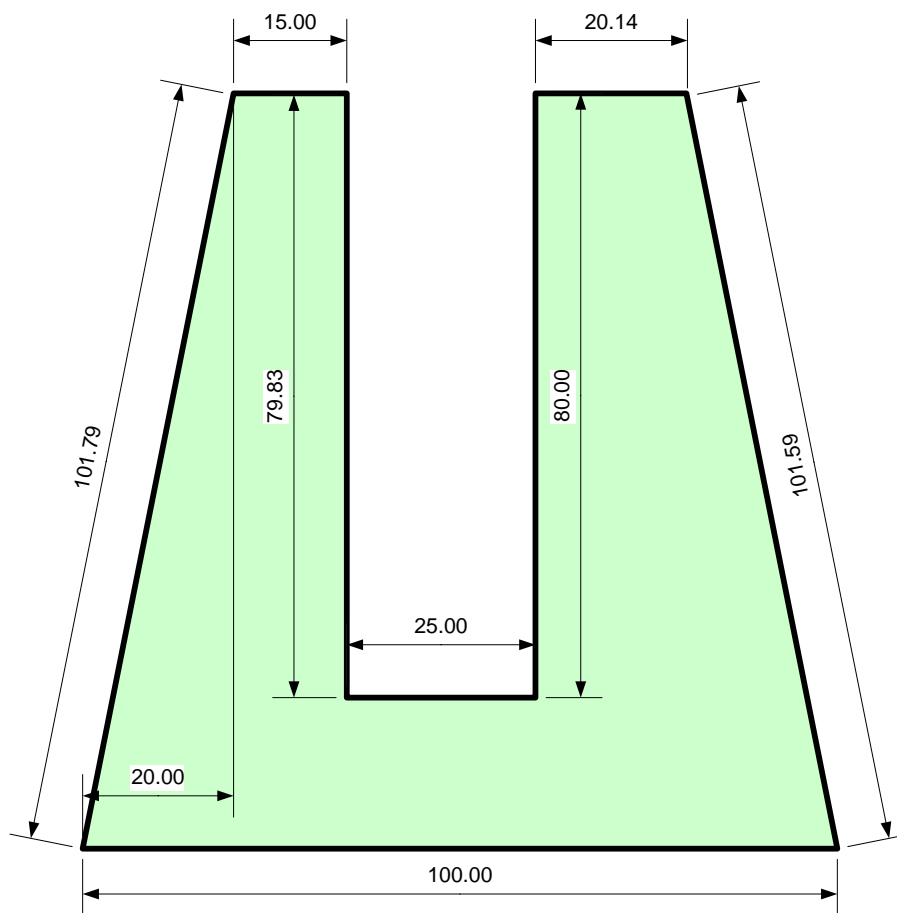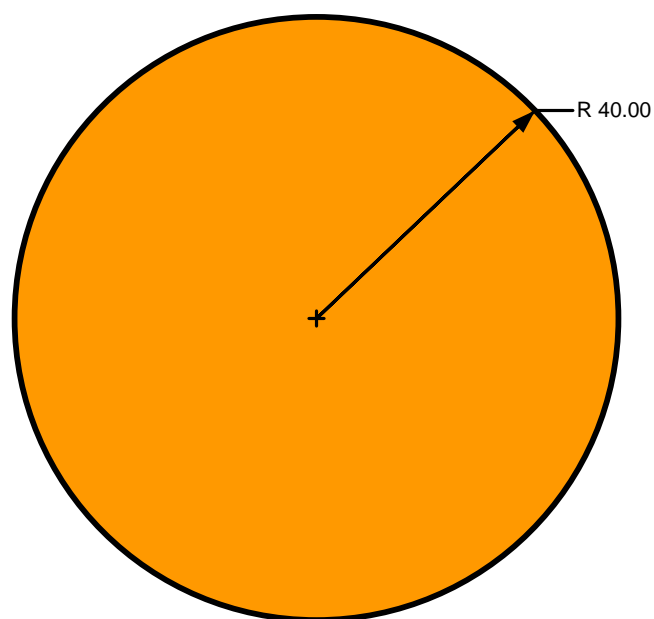
87.00

60.00

47.00

40.00

10.00

59.00

4.

89.44

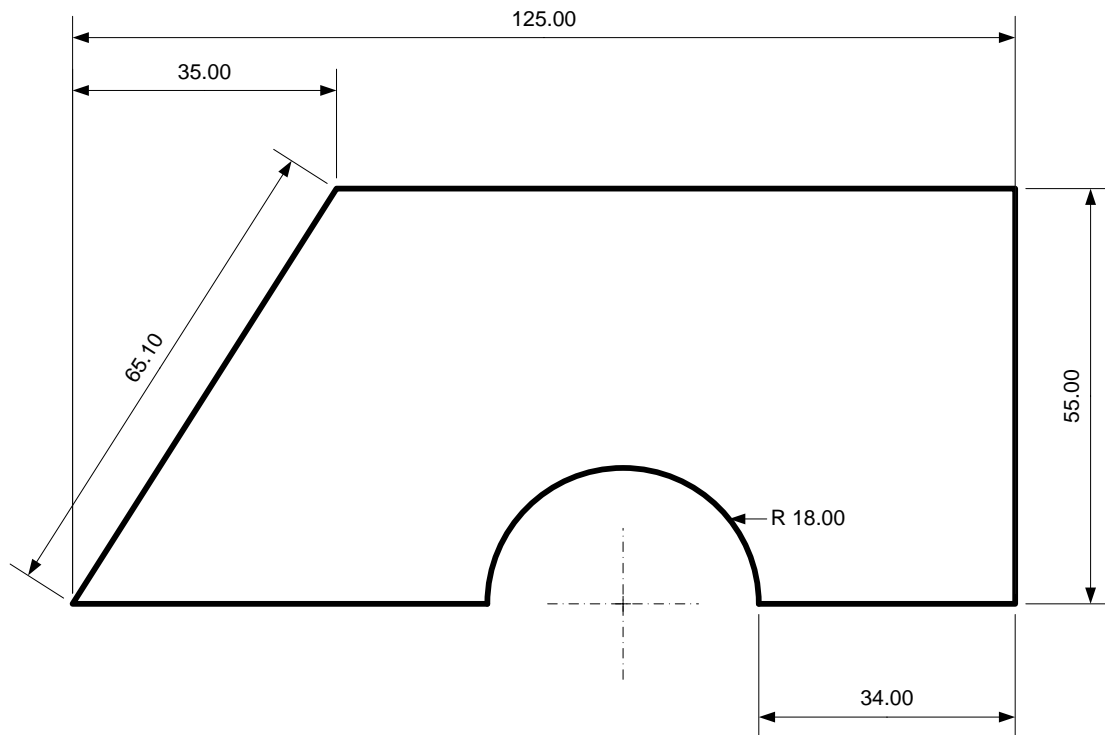40.20

40.00

40.00

100.00

5.

6.

Area of Irregular Shapes: **Working out problems from diagrams**

7.

The radius is 18mm and the diameter is twice the radius.

To work out the circumference of a circle, $2\pi r$, but this is only half a circle.

To work out the area of the shape, work out the triangle and then the rectangle and then deduct the area of the semi-circle.

8.

Draw a x-axis and a y-axis.

Join the point, (-6,-6) to (3,-6). Join (3,-6) to (3,7). Join (3,7) to (-6,-6).

Calculate the area of the shape drawn.