Name: _____
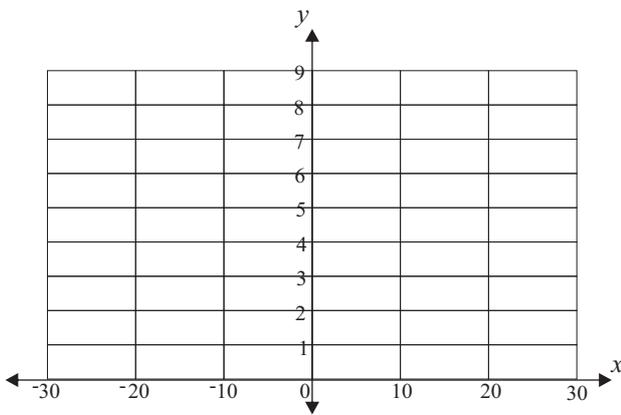
1. The shape of a TV satellite dish can be found by plotting the following points on the axes below. All dimensions are in centimetres.

x	-30	-20	-10	0	10	20	30
y	9	4	1	0	1	4	9

Use these points to draw the shape of the satellite dish on the axes below.

(a) How **wide** is the satellite dish?
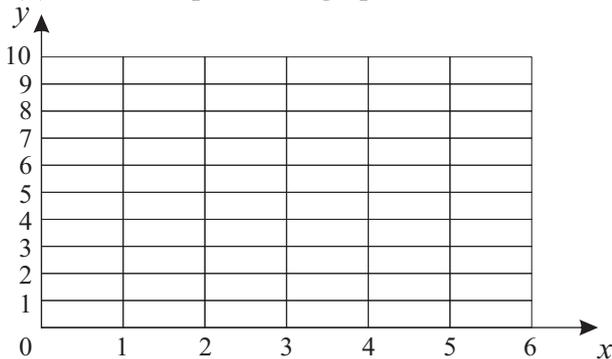
(b) How **deep** is the dish?

2. The equation for the curve formed by the ropes of a suspension bridge was:

$$y = x^2 - 6x + 10$$

(a) Complete this table of values for this equation.

x	0	1	2	3	4	5	6
y							

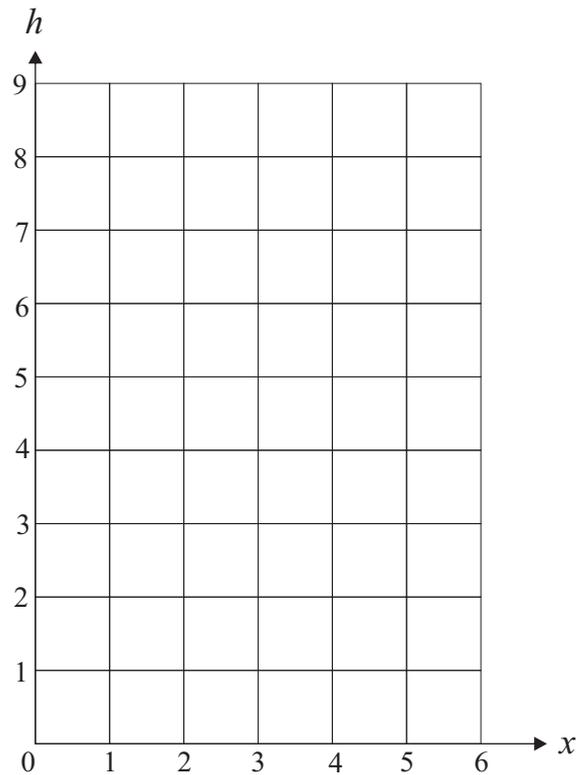(b) Plot these points on graph below.

3. A child throws a ball into the air. The path of the moving ball is given by the equation: $h = -x^2 + 6x$

where h = the height of the ball in metres. and x = the horizontal distance, in metres, of the ball from the child .

Complete this table using the above equation.

x	0	1	2	3	4	5	6
h							

Plot the points from the table and draw the path of the ball on the axes below.

(a) What was the maximum height of the ball?

(b) How far from the child did the ball land?