## Co-ordinates

## Challenge I

1 a) What is the co-ordinate of the point midway between $(2,4)$ and $(2,10)$ ?
b) What is the co-ordinate of the point midway between $(4,5)$ and $(10,11)$ ?

2 a) Plot these co-ordinates on the grid below.
$(3,5) \quad(4,9) \quad(5,5) \quad(6,9)$

b) What shape do they make? $\qquad$

## Challenge 2

1 Fill in the missing co-ordinates so that each set will make a rectangle.
a) $(2,2)(7,4)(7,2)$ $\qquad$ _(_)
b) $(6,5)(6,1)(4,1)($ $\qquad$ , $\qquad$

## Co-ordinates

2 Some treasure is hidden at the point of the missing vertex of this square: $(1,5)(4,5)(1,8)$. What is the co-ordinate of the treasure?


Marks

## Challenge 3

1 Write the co-ordinate that is needed to make each set into a rhombus.
a) $(10,9)(5,6)(6,10)(\square, \square)$
b) $(5,4)(3,8)(5,12)(\square, \square)$
c) $(12,18)(15,16)(12,14)(\square, \square)$

2 What is the perimeter of a rectangle positioned at $(7,6)(3,6)(3,8)(7,8)$ on a $1 \mathrm{~cm}^{2}$ grid?
$\qquad$ cm

