Mark schemes

Q1.

(a) (1, 6)

B1

(b) Mark at (6, 4)

Accept cross, dot etc

Mark must be intended to be on line BC

B1

(c) 2 × their 4 + 2 × their 5 or 8 + 10

4 or 5 must be correct

M1

18

SC1 22

A1

[4]

Q2.

(a) (1, 3)

B1

(b) Plot at (5, 3) or lines drawn to form rectangle

letter D need not be seen

B1

(c) 3 + 4 (= 7)

oe ± 1 mm for each length

M1

14

A1

[4]

Q3.

(a) (2, 5)

B1

(b) *B* plotted at (8, 1)

B1

(c) (5, 3)

ft from their B

B1 ft for 1 number correct or point shown on grid

B2 ft

[4]

Q4.

(a) (2, 4)

B1

(b) Point B plotted at (−3, −1)

B1

(c) (2, −1)

ft from their (a)

B1 ft

[3]

Q5.

(a) (5, 2)

B1

(b) Point correctly indicated on grid at (1,2)

B1

(c) (*A*, 4) and (*B*, 4)

B1 one correct point

where *A* and *B* are two different numbers

SC1 line y = 4 drawn

SC1 two correct points and no incorrect points marked on graph

B2

[4]

Q6.

(a) $x = 2$

B1

(b) Correct straight line drawn

at least 3 diagonal squares long

B1

(c) 2, 2

ft their intersection with line A only if B0 in part (b)

B1ft

[3]

Q7.

Alternative method 1

Plots (−1, 2) and (1, 6)

Mark intention

M1

Fully correct ruled line through the correct points

A1

Draws the line $y = x$

B1

(−4, −4)

ft their intersection

B1ft

Additional Guidance

Correct line drawn implies points (−1, 2) and (1, 6) are plotted

M1A1

Alternative method 2

Gradient = $\frac{6-2}{1-(-1)}$ or $\frac{2-6}{-1--1}$ or 2

oe

Implied by the correct equation

M1

(y =) $2x + 4$

Correct function for their gradient

M1dep

their $2x + 4 = x$

ft their function

M1

(−4, −4)

A1

Additional Guidance

$\frac{6-2}{1-(-1)} = -2$

M1

$y = -2x + 4$

M1

$-2x + 4 = x$

M1

$x = \frac{4}{3}$

A0

[4]

Q8.

Identifies or plots any two correct points

points with integer values are

x	−3	−2	−1	0	1	2	3
y	5	4	3	2	1	0	−1

may be in a list

ignore incorrect plots

M1

Correct straight ruled line from (–3, 5) to (3, –1)

ignore incorrect plots if correct line drawn

A1

Additional Guidance

Correct line, but not extending from (−3, 5) to (3, −1)

M1A0

Two lines, one correct and one incorrect

M1A0

[2]

Q9.

(a) −5 1 7 10

B1 for 2 or 3 correct

B2

(b) At least 2 of their points correctly plotted

M1

Straight ruled line drawn from (−3, −8) to (3, 10)

A1

(c) Draws the line $y = x$ on the grid or $-2x = 1$ or $-1 = 2x$

oe

M1

$-\frac{1}{2}$

oe

A1

[6]

Q10.

3 different mistakes identified

B1 for each different mistake identified from
It should be a straight line
Point (0, 1) plotted incorrectly
Two 3s on x-axis
Axes not labelled
Line not labelled (y = x + 1)

B3

Additional Guidance

Accept equivalent statements

[3]

Q11.

(a) (2, 5)

B1

(b) Point (6, 1) plotted

B1

(c) (6, 5)

ft if (6, 1) is wrongly plotted but their D completes a rectangle

B1 ft

(d) (4, 3)

ft for rectangle

B1 ft

[4]

Q12.

$\frac{x+3x}{2} = -4$

or $4x = 2 \times -4$ or $4x = -8$

or $2x = -4$

oe

M1

$x = -2$

oe

A1

$\frac{2y+4y}{2} = 15$

or $6y = 2 \times 15$ or $6y = 30$

or $3y = 15$

oe

M1

$y = 5$

oe

A1

[4]

Q13.

(a) −7

B1

5

B1

(b) At least 2 points correctly plotted

May be implied from a correct line

M1

Straight ruled line drawn from −3 to 3

$\pm \frac{1}{2}$ *square tolerance*

A1

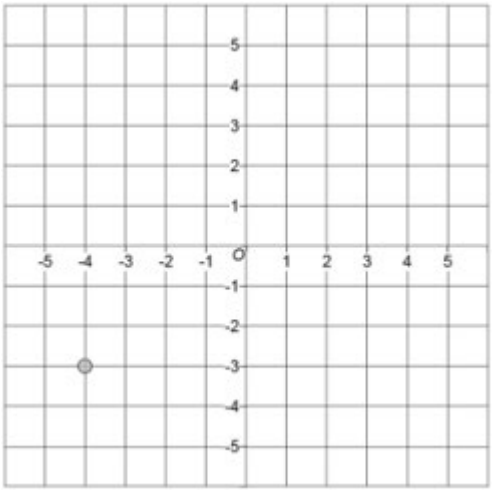
[4]

Q14.

(a) (–2, 3)

B1

(b) Point plotted at (–4, –3)



B1

(c) (–4,–3)

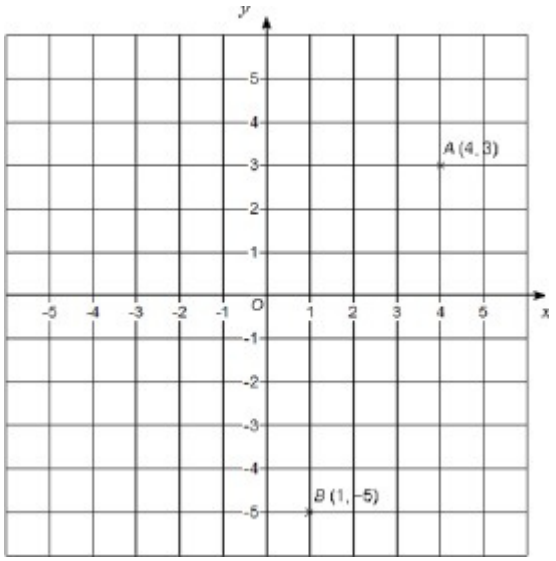
ft their plotted point
eg (6, –3) if used (ABDC)

B1 ft

[3]

Q15.

(a)



A plotted correctly

Need not be labelled

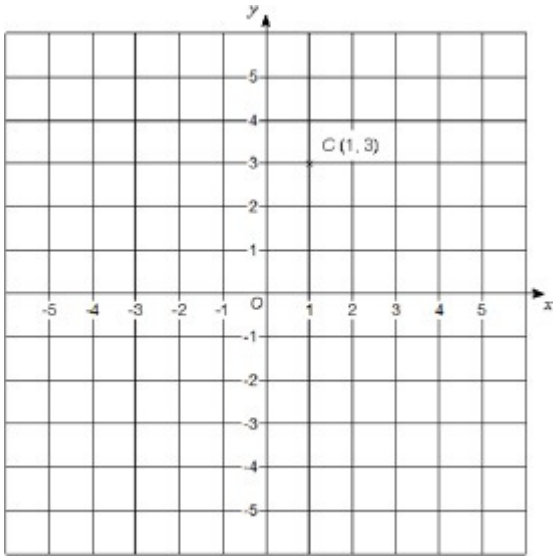
B1

B plotted correctly

Need not be labelled

B1

(b)

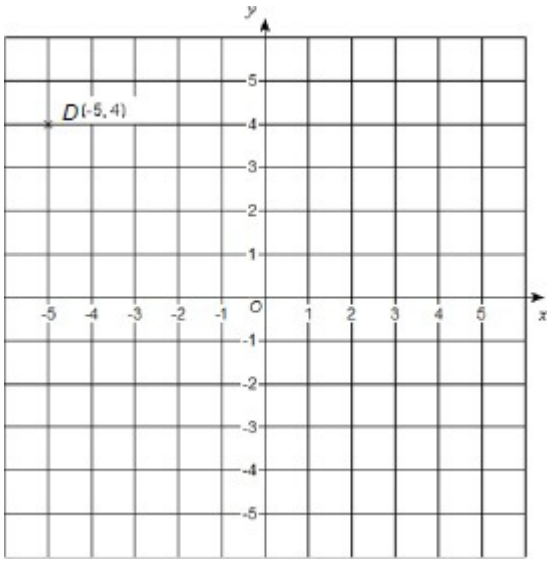


C plotted at (1, 3)

Need not be labelled

B1

(c)



D plotted at (−5, 4)

B1 for one coordinate correct
Need not be labelled

B2

[5]