

M1.(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]

M2.(a) Either correct rectangle drawn

$A, B, (7, 2)$ and $(3, 2)$

or $A, B, (7, 8)$ and $(3, 8)$

(ignore labels)

B1 for $(7, 2)$ and $(3, 2)$ plotted

or for $(7, 8)$ and $(3, 8)$ plotted

B1 for any rectangle with area 12 cm^2

B1 for any rectangle with vertices A and B.

B2

(b) $C(7, 2)$ and $D(3, 2)$

or $C(7, 8)$ and $D(3, 8)$

B1 for correct coordinates with incorrect order ie D and C reversed

ft their rectangle or square ABCD for up to B2

ft their rectangle or square ABDC for up to B1

B2ft

[4]

M3. Any two points of the form $(x, 2x + 1)$ except $(-2, -3)$ and $(-4, -7)$

B1 any one correct point

B2
[2]

M4.

(a) Point plotted at $(5, 1)$

B1

(b) Points plotted at $(3, 1)$ and $(5, 3)$

*B1 for either
ft their point plotted in (a)*

B2ft

(c) $4, 2$

ft their points plotted in (b)

B1ft
[4]

M5.

(a) $(2, 2)$

B1

(b) **Alternative method 1**

Draws line through their two correct points crossing x-axis

or

plots point on x-axis consistent for their two correct points

$3.5, 0$

*ft the two points not selected in (a)
SC1 0, 3.5*

M1

A1ft

Alternative method 2

$$2x (+ 0) = 7$$

$$3.5, 0$$

SC1 0, 3.5

M1

A1

[3]

M6.

(a) (4, 1)

B1

(b) Correct plot at (-2, 4)

Allow point at (4, -2) if (a) stated as (1, 4)

B1ft

[2]

M7.

x coordinate = 2

(2, 4) marked on diagram.

B1

Base = 7 - - 3 (= 10)

10 marked on diagram as base or stated as base in script.

*This mark is for showing that the base is 10 and **not** for 7 - - 3 = 10 if used to find the x coordinate.*

B1

Height = 20 ÷ their 10 × 2 (= 4)

4 marked on diagram as height

***NB** height shown or stated as 4 is 2 marks (assume base of 10)*

M1

y coordinate = 8

ft their height if M awarded and no other errors.

Accept

NB 8 stated as y coordinate is B1, M1, A1 (ie last 3 marks)
unless contradictory or wrong working.

A1ft
[4]

M8.

(a) (6, 4)

B1

(b) 700

*B1 7 seen
or
600 or 800
or
Shortest route shown on diagram*

B2

(c) (3, 6)

*Allow (6, -1) or (7, 0) or (8, 1) for B2
B1 (0, 5) or (1, 4) or (1, 6) or (2, 3) or
(2, 5) or (3, 2) or (4, 1) or (4, 5) or
(5, 0) or (5, 4) or (6, 3)
or
(2, 6)*

B2
[5]

M9.(10, 1)

*B1 for one correct coordinate
SC1 for (4, 7)*

B2

Additional Guidance

(10, 2) is B1

(9, 1) is B1

(1, 10) is B0

[2]

M10.(a) A (-3, -5)

B1

B (2, -3)

SC1 for A (2, -3) and B (-3, -5)

B1

(b) C plotted at x-coordinate less than -3

B1

C plotted at y-coordinate 2 or 4 or 6

SC1 for correct coordinates if no point plotted

B1

Additional Guidance C does not need to be labelled if intention is clear. The x-coordinate need not be an integer. C plotted at: (-3.5, 2)
(-3.5, 3) (-4, 0) (2, 2)

B1 B1

B1 B0

B1 B0

B0 B1

$(-3, -2)$

B0 B0

[4]

M11.(a) $(3, 5)$

B1

(b) $(1, 3), (3, 3)$ and $(5, 3)$
In any order
B1 for each

B3

[4]

M12.

(a) $(1, 4)$

B1

(b) M plotted at $(3, 4)$

M1

B plotted at $(5, 4)$
SC 1 $(7, 2)$

A1

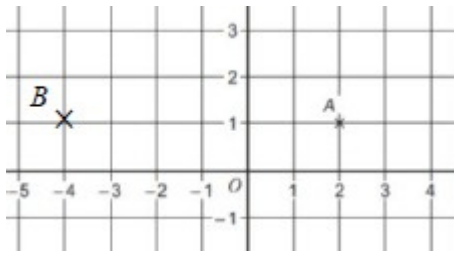
[3]

M13.

(a) $(2, 1)$

B1

(b) Correct plot



Accept point drawn but not labelled or just B in correct position

B1

- (c) C marked at (2, -3) or (-4, -3) or (-4, 5) or (2, 5)

B1 for any right angled triangle with AB as a side.

B1 for C marked anywhere on $y = -3$ or $y = 5$

Do not need to have lines drawn

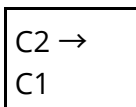
ft for their B

B2ft

[4]

M14.

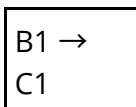
- (a) (A3 → B3 → B2 →)



(→ D1)

B1

- (A3 → A2 → A1 →)



(→ D1)

or

- (A3 → A2 → A1 →)

$B1 \rightarrow C1 \rightarrow C2 \rightarrow B2 \rightarrow$ $B3 \rightarrow C3 \rightarrow D3 \rightarrow D2$
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(→ D1)

B1

(b) (i) 1

B1

(ii) C2 or 2C

B1

(iii) (A3 → B3 →)

$B2 \rightarrow A2 \rightarrow A1 \rightarrow B1 \rightarrow$ $C1$

(→ D1)

B1 1 (+) 1 (+) 2 (+) 2 (+) 2 (+) 1

or

9 seen

or

(A3 → B3 →)

$B2 \rightarrow C2 \rightarrow$ $C1$

(→ D1)

or

8 seen

B2

[6]

B1

(b) Point B plotted at $(-3, -1)$

B1

(c) $(2, -1)$

ft from their (a)

B1 ft

[3]

M16.(a) $(2, 3)$

B1

(b) Point plotted 8 across and 3 up

Mark intent

Label B can be missing

*SC1 For reversed coordinates $(3, 2)$ in (a) **and** point plotted 3 across and 8 up*

B1

[2]

M17.(a) $(1, 6)$

B1

(b) $(4, 6)$

B1

(c) Point plotted at $(4, y)$ such that $0 \leq y < 6$ **and** $y \neq 4$

e.g. $(4, 0)$ or $(4, 1)$ or $(4, 2)$ or $(4, 3)$ or $(4, 5)$

B1

[3]

