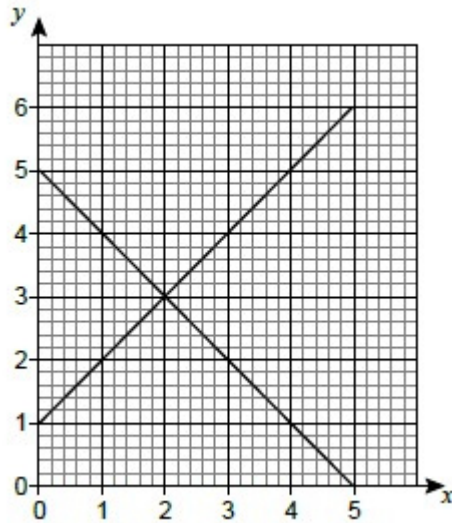**M1.**

(a)   Straight line through
(0, 1), (1, 2), (2, 3), (3, 4), (4, 5) and (5, 6)

B1 Two correct points plotted

B2

(b) $x = 2$ and $y = 3$

ft their linear graph from (a)

B1ft

[3]

M2.(a)   90

B1

(b)   240

B1

(c)   410

B1

150 + 6 × 50 or 450

> *oe*
> *450 − 410 is B1M1*

M1

A and 40

> *ft their 410 (value indicated for law firm A)*
> *A and 40 is B1M1A1*

A1ft

Alternative method

410

B1

Line from (90, 150) to (270, 450)

M1

A and 40

> *ft their 410 (value indicated for law firm A)*
> *A and 40 is B1M1A1*

A1ft

[5]

M3.(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]

M4. Any two points of the form (x, $2x + 1$) except (−2, −3) and (−4, −7)

      B1 any one correct point

                                                                         B2

                                                                            [2]

M5. (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

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

                                                                   A1

                                                                   [4]

M6.

    (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

M1

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

A1ft

Alternative method 2

2*x* (+ 0) = 7

M1

3.5, 0
> *SC1 0, 3.5*

A1

[3]

M7.(a)   −4, 2, 8
> *B1 for two correct*

B2

(b)   Two of their points plotted correctly
> *ignore incorrect points*

M1

Fully correct straight ruled line from (−2, −4) to (2, 8)

A1

Additional Guidance

Lines must be clearly drawn with a ruled line

(c)   3

B1

Additional Guidance

$\dfrac{3}{1}$ on answer line is B1

[5]

M8.(a)   Correct straight line at least 2 vertical squares in length

If drawn without a ruler must be within ±1mm of the actual line

B1

(b)   Correct straight line at least two 'diagonals' in length

If drawn without a ruler must be within ±1mm of the points (1, 1), (2, 2) etc

If the correct answers to both parts have been transposed, award B1 in this part

B1

[2]

M9.2 or 3 correct plots

±½ square tolerance

M1

Fully correct straight ruled line from (−3, −3) to (3, 9)

±½ square tolerance

A1

Additional Guidance

2 or 3 correct points from (−3, −3) (−2, −1) (−1, 1) (0, 3) (1, 5) (2, 7) (3, 9) for the first M1

Ignore additional points

[2]

M10.

(a)   7

B1

(b)   Points correctly plotted
               ft from their table

M1

Correct line drawn for $-1 \leqslant x$

A1

(c) $y = 5$ drawn

B1

[4]

M11.
(a) $3 \times 4 \ (=12)$
                    $7 = 3x - 6$

M1

$12 - 6 = 6$
                    $x = 4.3$

A1

Alternative 1
Correct line from $y = 3$ to $y = 4$

M1

Correct line from $y = 3$ to $y = 4$ and plots (4, 7) or writes correct justification

A1

Alternative 2
$3 \times 4 \ (= 12)$

M1

Line should be $y = 3x - 5$

A1

(b) $0 = 3x - 6$

M1

2, 0

A1

Alternative
Correct line from *x* = 1 to *x* = 2 or
correct line from *x* = 2 to *x* = 3

M1

2, 0

A1

[4]

M12.(a)　　−5 −1 3
　　　　　　　　　B1 for 1 or 2 correct

B2

(b)　　Fully correct line drawn
　　　　　　B1ft at least 3 points plotted correctly (using their table)
　　　　　　or B1 part of the correct line drawn

B2

[4]

M13.y intercepts at 1 and − 1
　　　　　　oe eg 1 and (−) 1 marked on diagram

B1

(y =) 7 (at *B*) and (y =) − 4 (at *D*)
　　　　　　oe eg 7 and (−) 4 on diagram or in working

B1

1 − − 1 (= 2) **or** 7 − − 4 (= 11)
　　　　　　Using their coordinates

M1

2 : 11 *oe*

A1

[4]

M14.(a)   Correct straight (if not drawn with a ruler then intention to be straight) line graph from (0, −1) to (4, 7) with 1mm

> *B2 correct line but not from (0, −1) to (4, 7) for at least a*
> *continuous x distance of 2.*

(½square) tolerance

> *B2 all integer points (any others must also be correct)*
> *between 0 and 4 plotted but line not drawn*

Allow a dashed line

> *B2 correct but more than ½ square from tolerance*
> ***Only one of these may be awarded.***
> *B1 straight line graph through (0, −1) of any length even if*
> *crooked later but not x = 0 or y = −1*
> *B1 Single straight line graph with gradient 2 of any length*
> *B1 two correct points calculated (eg in table) or plotted*
> *Any line that is not straight is B0 although the B1 for two*
> *points calculated or plotted may still be gained*

B3

(b)   1.5

> *Correct (eg from algebra) or ft their graph if drawn to*
> *the graph and then a vertical line to x-axis*

B1

[4]

M15.

(a)   2

B1

(b)   Plots their points

M1

Correct line

A1

(c)   2.5, 2.5

ft if possible

B1ft

[4]

M16.(a)   −3, −1, 3

B1 for 1 or 2 correct

B2

(b)   At least 2 of their 5 points plotted correctly

May be implied from straight line
± ½ square

M1

Fully correct straight ruled line from − 2 to 2

± ½ square

A1

[4]