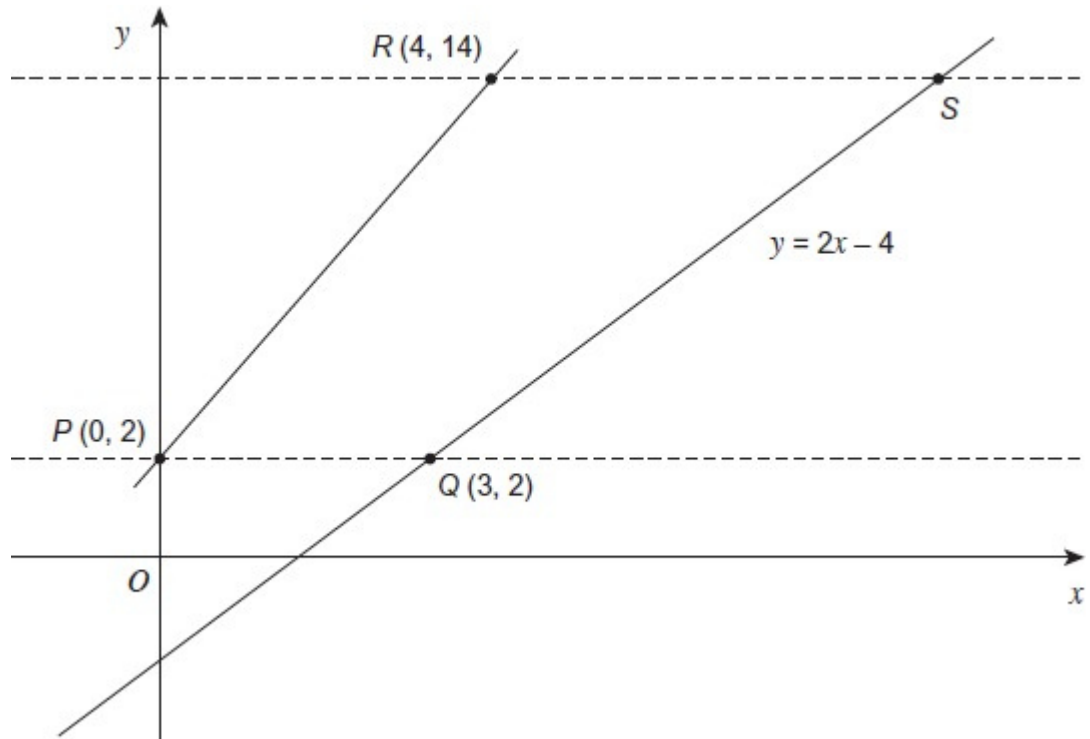


Q1.

The two dashed lines are both parallel to the x -axis.

Not drawn accurately



(a) Circle the equation of line PR .

$y = 2x + 2$

$y = 3x + 2$

$y = 4x + 2$

$y = 3.5x + 2$

(1)

(b) The equation of line QS is $y = 2x - 4$

Work out the ratio of lengths $PQ : RS$

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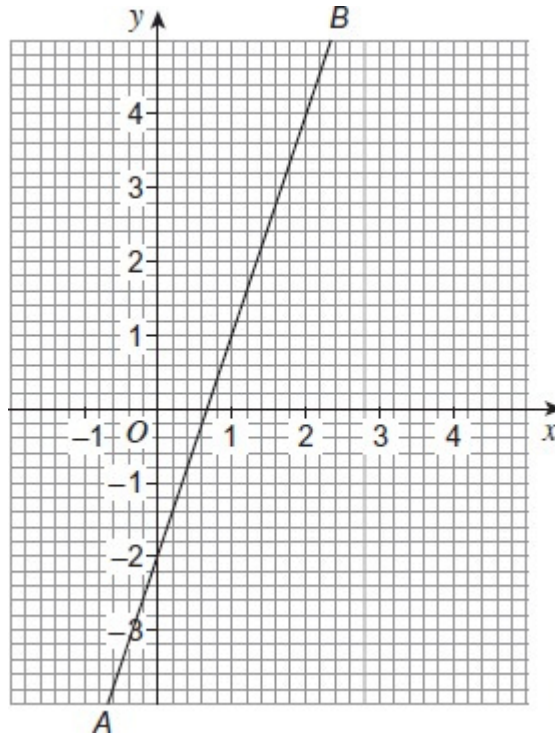
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Answer :

(3)
(Total 4 marks)

Q2.



Work out the equation of line AB.

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Answer

(Total 3 marks)

Q3.

A straight line has gradient -2 and passes through the point $(-3, 10)$.

Work out the equation of the line.

Give your answer in the form $y = mx + c$

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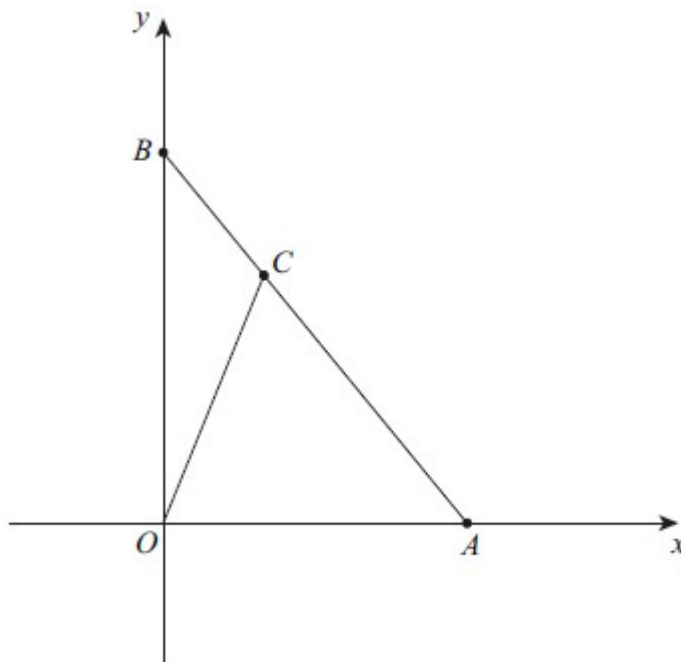
Answer

(Total 2 marks)

Q4.

The equation of line AB is $y = 12 - 2x$

The area of triangle OCA is 24 square units.



Work out the coordinates of C .

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Answer (..... ,))

(Total 5 marks)

Q5.

The line $y = mx + c$ passes through the point (4, 3).
It is parallel to the line $y = 5x + 6$

Work out the values of m and c .

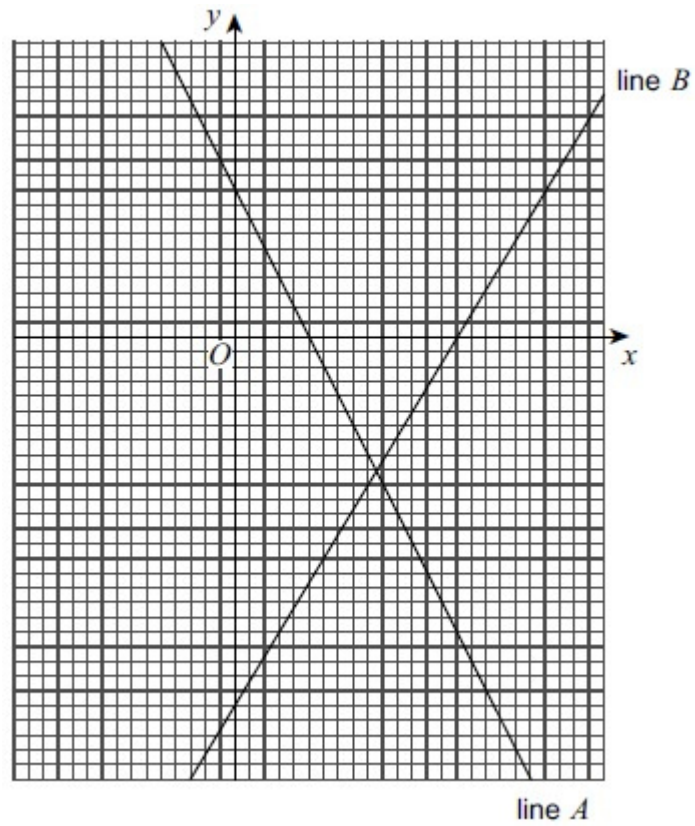
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$m = \dots\dots\dots, c = \dots\dots\dots$

(Total 3 marks)

Q6.

The graph shows two straight lines.



The equation of line A is $y = 2 - x$ Work out the equation of line B.

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Answer.....

(Total 4 marks)

Q7.(a) A sequence starts

4 8 12 16 ...

The n th term is $4n$

Circle the n th term of this sequence

6 10 14 18 ...

$4n$

$6n$

$4n + 2$

$6n + 2$

(1)

(b) These points are in a straight line.

Point 1 (4, 6) (8,

Point 2 10) (12,

Point 3 14) (16,

Point 4 18)

Write down the coordinates of Point n in this sequence.

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Point n (..... ,)

(1)

(c) Work out the equation of the straight line that passes through these points.

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Answer

(2)

(Total 4 marks)

Q8. Billy asked 20 people,

“What is your favourite crisp flavour?”

(a) Complete the tally chart to show Billy's results.

Favourite crisp flavour	Tally	Frequency
Plain		12
Cheese and Onion		
Barbecue		3
	Total	20

(2)

(b) Billy uses his tally chart to draw a pictogram.

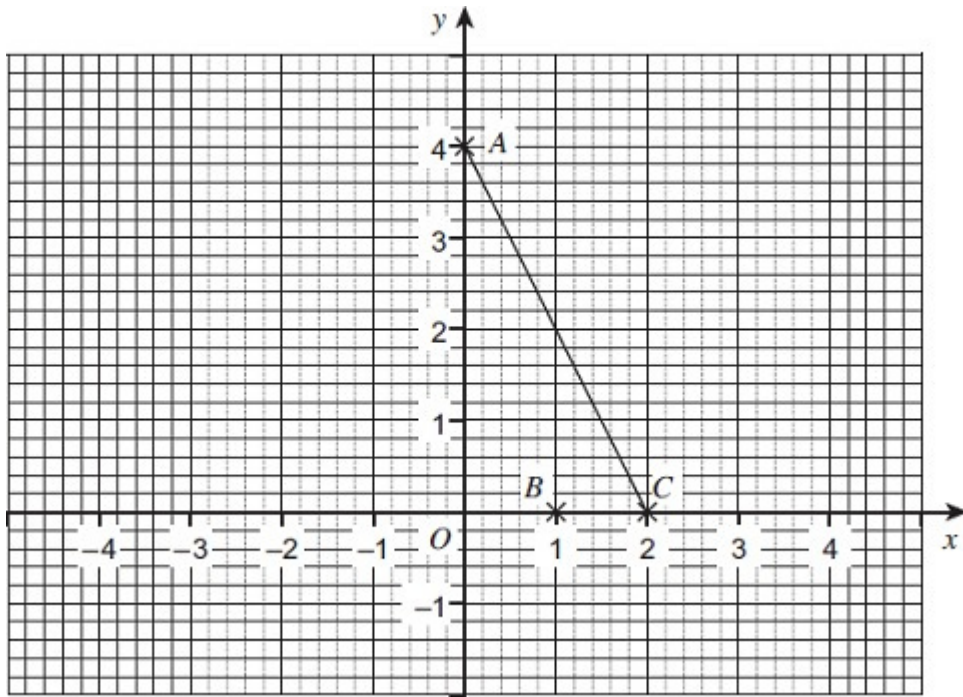
Complete the pictogram and the key.

Key: represents people

Plain	
Cheese and Onion	
Barbecue	○ ◐

(3)
(Total 5 marks)

Q9. Show clearly that the equation of the line through B parallel to AC is $2x + y = 2$



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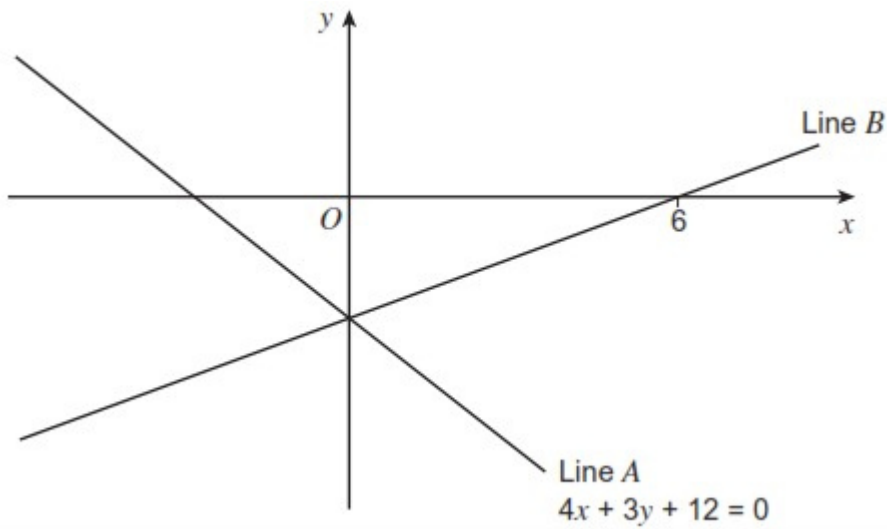
(Total 3 marks)

Q10. Lines *A* and *B*, intersect on the *y*-axis.

Line *B* intersects the *x*-axis at the point (6, 0).

The equation of line *A* is $4x + 3y + 12 = 0$

Not drawn accurately



Work out the equation of line *B*.

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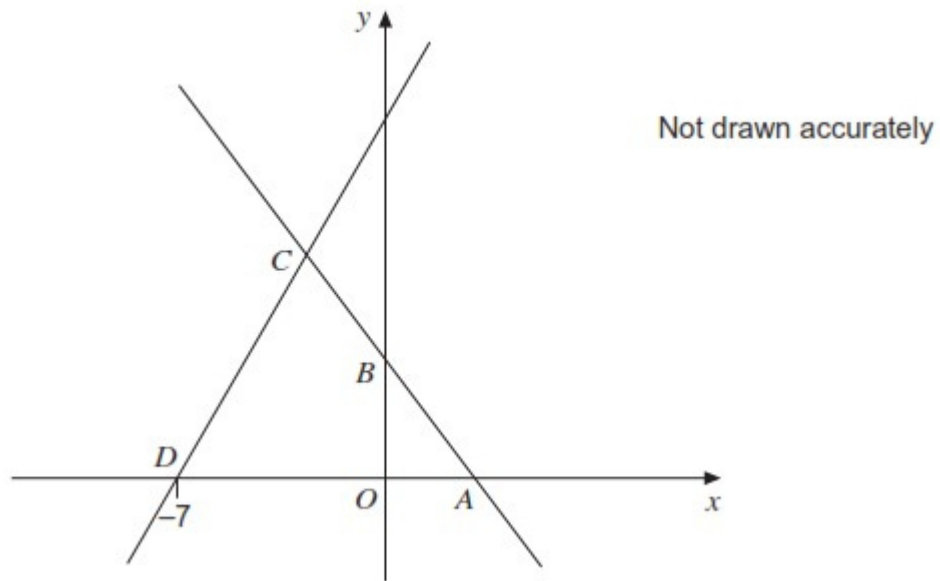
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Answer

(Total 4 marks)

Q11. In the diagram, points *A*, *B* and *C* lie on the line $2y = 6$
B is the midpoint of *AC*
D is the point $(-7, 0)$.



Work out the equation of the line through C and D .

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Answer

(Total 5 marks)

Q12. Circle the **two** equations that are equivalent to $2y = 3x + 4$

A $2x = 3y + 4$

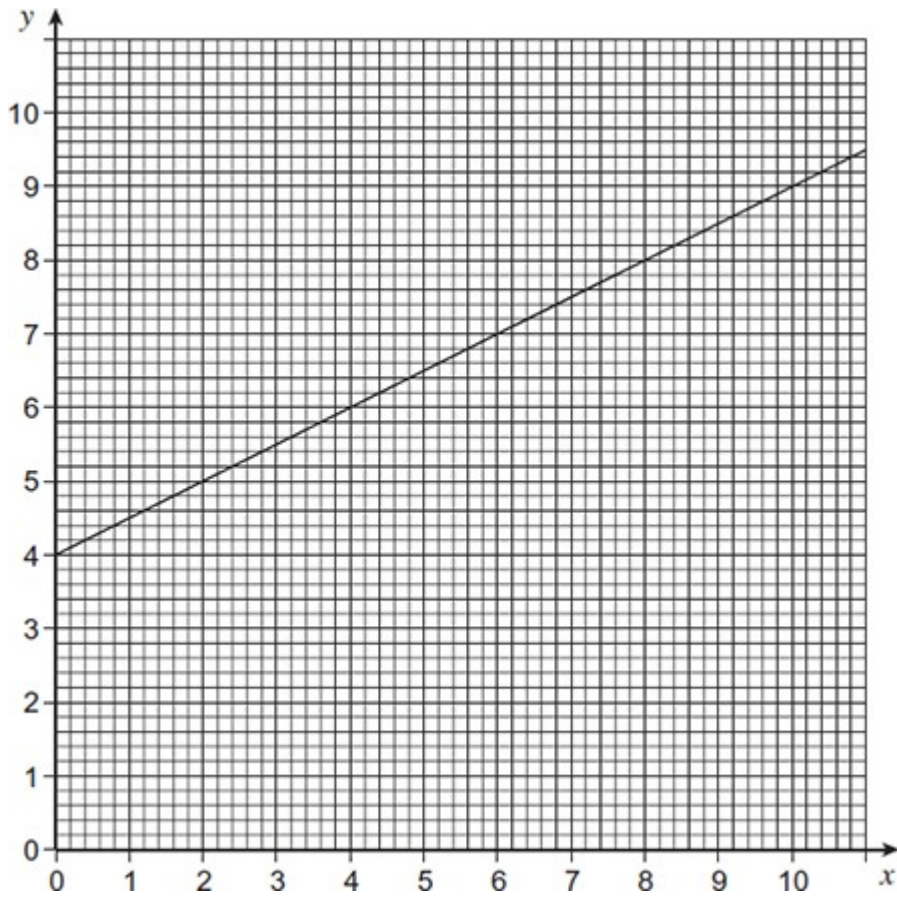
B $y - \frac{3}{2}x = 2$

C $y = \frac{3}{2}x + 4$

D $3x - 2y + 4 = 0$

(Total 2 marks)

Q13. Work out the equation of the line shown.

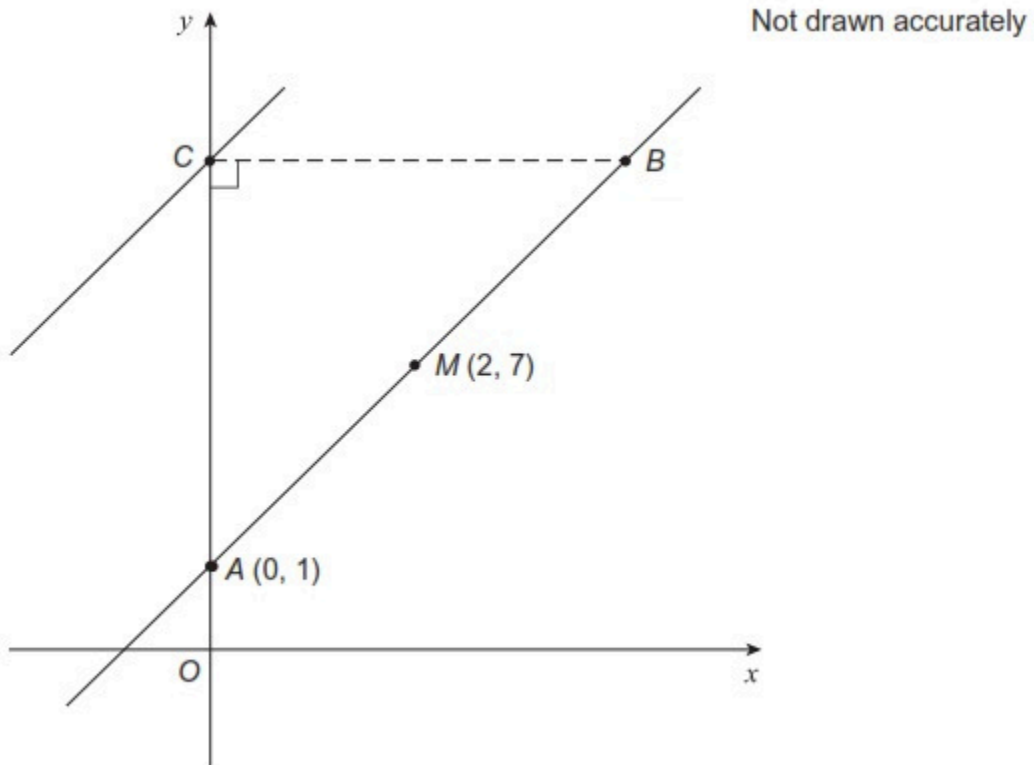


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Answer

(Total 3 marks)

Q14. On the grid, A is the point $(0, 1)$.
 The midpoint, M , of AB is $(2, 7)$.
 The gradient of AB is 3.



Work out the equation of the line through C that is parallel to AB .

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Answer

(Total 3 marks)