

## Non-Calculator

Q1.

- (a) Line  $M$  has the equation  $3x + 2y = 7$

Circle the gradient of line  $M$ .

$-3$                    $-\frac{3}{2}$                    $3$                    $\frac{3}{2}$

(1)

- (b) Line  $N$  has the equation  $y = 5 - \frac{3}{4}x$

Circle the gradient of a line that is perpendicular to line  $N$ .

$-\frac{4}{3}$                    $\frac{3}{4}$                    $\frac{4}{3}$                    $3$

(1)

(Total 2 marks)

Q2.

The equations of five straight lines are given below.

The line  $y = 3x - 1$  is parallel to two of the lines.

Circle the equations of these two lines.

$y = 3x$        $y = -1$        $y = -3x - 1$        $y = 2x - 1$        $y = 3x + 1$

(Total 2 marks)

## Calculator

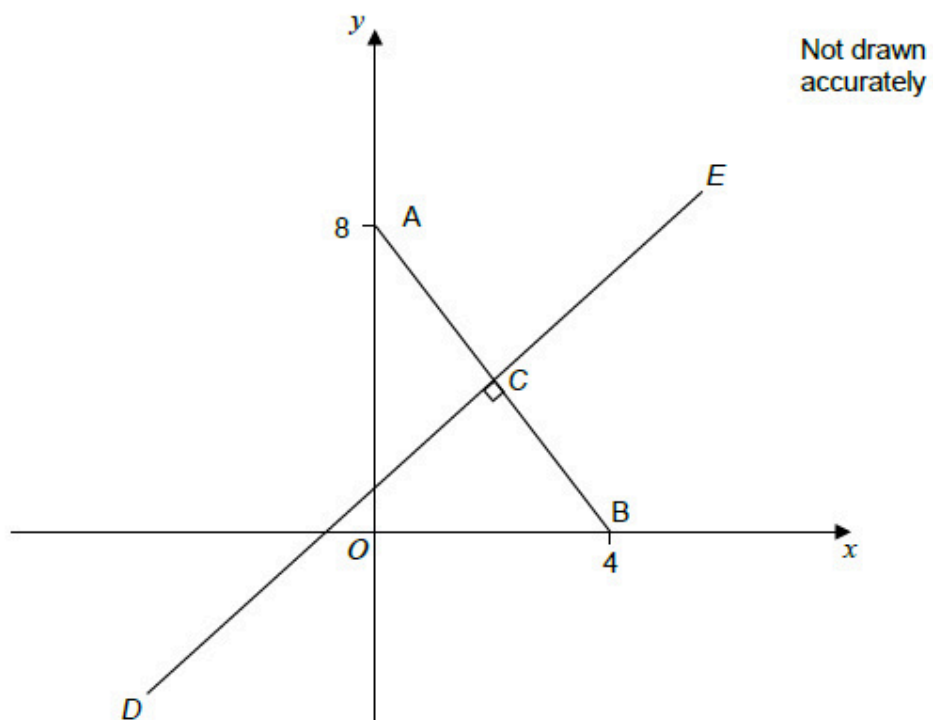
Q3.

$ACB$  is a straight line.

$A$  is the point  $(0, 8)$ , and  $B$  is the point  $(4, 0)$

$C$  is the midpoint of  $AB$ .

Line  $DCE$  is perpendicular to line  $ACB$ .



Work out the equation of line  $DCE$ .

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Answer \_\_\_\_\_

(Total 5 marks)

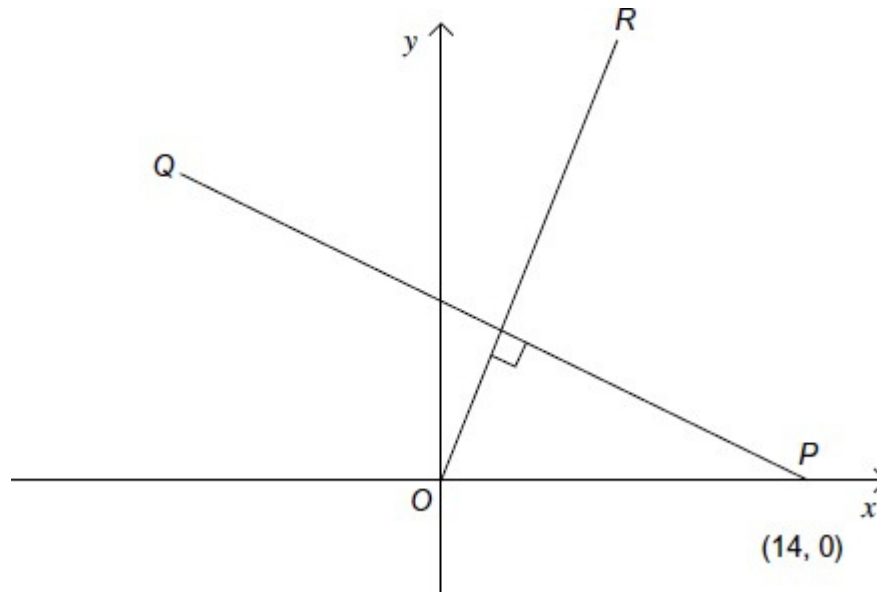
Q4.

The gradient of line  $OR$  is  $\frac{7}{4}$

$PQ$  is perpendicular to  $OR$ .

$P$  is the point  $(14, 0)$ .

Not drawn accurately



Work out the equation of line  $PQ$ .

Give your answer in the form  $ax + by = c$ , where  $a$ ,  $b$  and  $c$  are integers.

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Answer \_\_\_\_\_

(Total 4 marks)