

Coordinate geometry – 2024 O Level Math D 4024**1. June/2024/Paper_4024/11/No.23**

AB is a line segment joining $A(-2, 5)$ and $B(1, 3)$.

- (a) B is the midpoint of the line segment AC .

Find the coordinates of C .

(..... ,) [1]

- (b) The length AB is \sqrt{t} .

Find the value of t .

$t = \dots\dots\dots$ [2]

- (c) Find the equation of the line perpendicular to AB that passes through A .
Give your answer in the form $y = mx + c$.

$y = \dots\dots\dots$ [4]

2. June/2024/Paper_4024/11/No.11(a, c)

Q is the point $(n, -4)$, R is the point $(-1, 8)$ and S is the point $(3, 2)$.

(a) The length QR is 13 units.

Find the two possible values of n .

$n = \dots\dots\dots$ or $n = \dots\dots\dots$ [3]

(c) Find the equation of the perpendicular bisector of RS .

..... [5]