## The Line (Q 2, Paper 2)

2008
2 (a) Find the area of the triangle with vertices $(0,0),(8,6)$ and $(-2,4)$.
(b) $L$ is the line $y-6=-2(x+1)$.
(i) Write down the slope of $L$.
(ii) Verify that $p(1,2)$ is a point on $L$.
(iii) $L$ intersects the $y$-axis at $t$. Find the co-ordinates of $t$.
(iv) Show the line $L$ on a co-ordinate diagram.
(c) $o(0,0), a(5,2), b(1,7)$ and $c(-4,5)$ are the vertices of a parallelogram.
(i) Verify that the diagonals [ob] and [ac] bisect each other.
(ii) Find the equation of $o b$.

## Answers

2 (a) 22 units squared
(b) (i) -2
(iii) $(0,4)$
(iv)

(c) (ii) $7 x-y=0$

