THE LINE (Q 2, PAPER 2)

LESSON NO. 4: SLOPE OF A LINE

2003

2 (b) $a(-2, 2)$, $b(4, 6)$ and $c(0, -4)$ are three points.

p is the midpoint of $[ab]$ and q is the midpoint of $[ac]$.

(i) Find the co-ordinates of p and the co-ordinates of q.

(ii) Plot a, b, c, p and q on a co-ordinate diagram on graph paper.
Show the line segments $[bc]$ and $[pq]$ on your diagram.

(iii) Using slopes, or otherwise, prove that pq is parallel to bc.

ANSWERS

2003 2 (b) (i) $p(1, 4)$, $q(-1, -1)$ (ii)

(iii) Slope of pq = Slope of $ab = \frac{5}{2}$