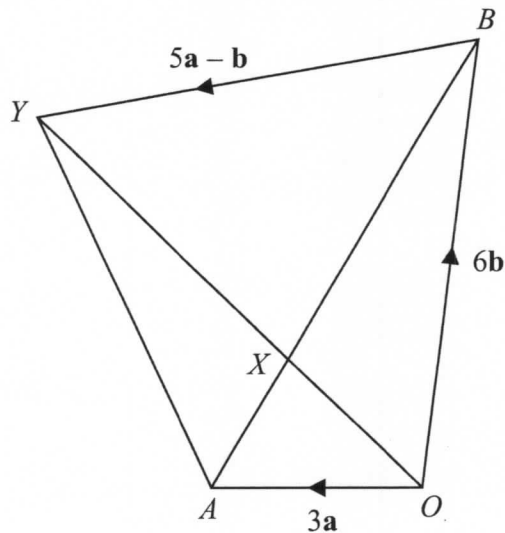


26

Diagram NOT  
accurately drawn $OAYB$  is a quadrilateral.

$$\vec{OA} = 3\mathbf{a}$$

$$\vec{OB} = 6\mathbf{b}$$

(a) Express  $\vec{AB}$  in terms of  $\mathbf{a}$  and  $\mathbf{b}$ .

(1)

 $X$  is the point on  $AB$  such that  $AX : XB = 1 : 2$ and  $\vec{BY} = 5\mathbf{a} - \mathbf{b}$ \*(b) Prove that 
$$\vec{OX} = \frac{2}{5}\vec{OY}$$

(4)

(Total for Question 26 is 5 marks)

TOTAL FOR PAPER IS 100 MARKS

