23

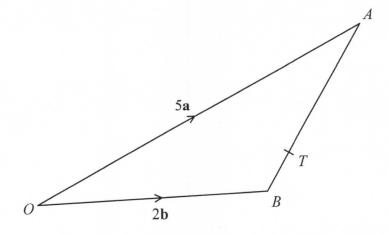


Diagram **NOT** accurately drawn

OAB is a triangle.

$$\overrightarrow{OA} = 5\mathbf{a}$$

$$\overrightarrow{OB} = 2\mathbf{b}$$

T is the point on AB such that AT : TB = 5 : 1

Show that OT is parallel to the vector $\mathbf{a} + 2\mathbf{b}$

(Total for Question 23 is 4 marks)