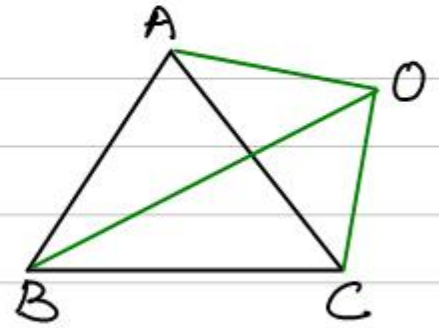


Class VII, ex 15 C, Page 4

Solutions by Dev Anoop



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to prove  $2(OA + OB + OC) > AB + BC + CA$

proof In  $\triangle AOB$   
 $OA + OB > AB \dots \textcircled{i}$

In  $\triangle BOC$   
 $OB + OC > BC \dots \textcircled{ii}$

In  $\triangle AOC$   
 $OA + OC > AC \dots \textcircled{iii}$

[Sum of any  
2 sides of  $\triangle$   
is greater than  
third side]

$$\textcircled{i} + \textcircled{ii} + \textcircled{iii}$$

$$OA + OB + OB + OC + OA + OC > AB + BC + AC$$

$$\Rightarrow 2(OA + OB + OC) > AB + BC + CA$$