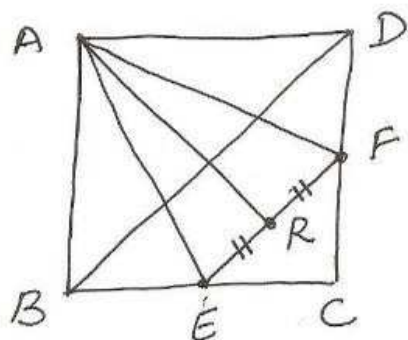


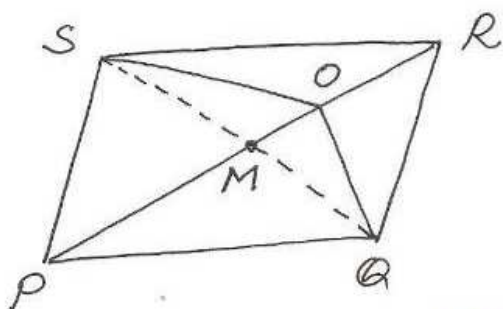
5



to prove  $ar(\triangle AER) = ar(\triangle AFR)$   
 proof AR is median  
 to side EF of  $\triangle AEF$

$\therefore ar(\triangle AER) = ar(\triangle AFR)$   
 [ Median divides a  $\triangle$  into 2  $\triangle$ s equal in area ]

6



to prove  
 $ar(\triangle PSO) = ar(\triangle QSO)$

proof PM is median  
 to side SQ of  $\triangle PSQ$

$$ar(\triangle PSM) = ar(\triangle PQM) \quad \dots \textcircled{i}$$

OM is median to

side SQ of  $\triangle OSQ$

$$\therefore ar(\triangle OMS) = ar(\triangle OMQ) \quad \dots \textcircled{ii}$$

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

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

$$ar(\triangle PSM) + ar(\triangle OMS) = ar(\triangle PQM) + ar(\triangle OMQ)$$

$$\Rightarrow ar(\triangle PSO) = ar(\triangle QSO)$$