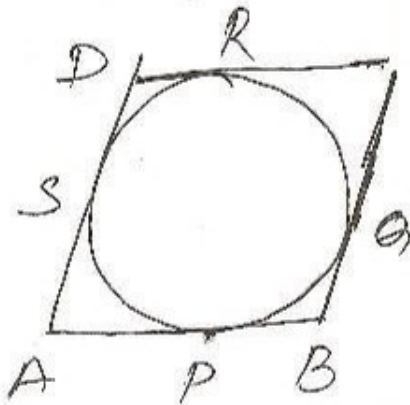


(11)



To Prove $\square ABCD$ is a rhombus

Proof - $AP = AS \dots (i)$ tangents from same external point to the circle
 $BP = BQ \dots (ii)$
 $CR = CQ \dots (iii)$
 $DR = DS \dots (iv)$

$$(i) + (ii) + (iii) + (iv)$$

$$AP + BP + CR + DR = AS + DS + BQ + CQ$$

$$\Rightarrow AB + CD = AD + BC$$

But $AB = DC$ and $BC = AD$ (Opp. Sides of \square)

$$AB + AB = AD + AD$$

$$\Rightarrow 2AB = 2AD$$

$$\Rightarrow AB = AD$$

$\therefore \square ABCD$ is a rhombus.