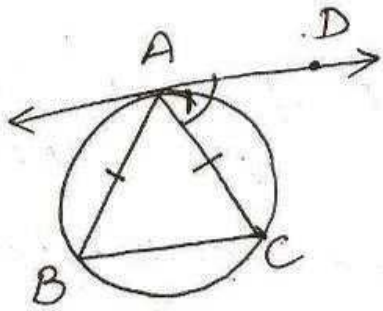


7



In ΔABC
 $AB = AC$
 $\Rightarrow \angle C = \angle B$ (isos. Δ prop.)

But $\angle 1 = \angle 2$ (angles in alternate segment)

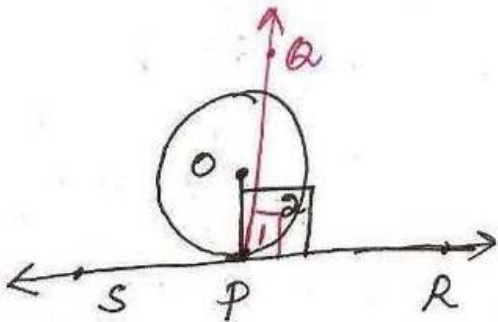
$\therefore \angle 1 = \angle C$
 But these are alternate interior angles

$AD \parallel BC$

True.

8

NCERT Exemplar Solutions by Dev Anoop (bathinda)



$PA \perp SR$ (given)
 $\therefore \angle 1 = 90^\circ \dots \textcircled{i}$

join OP
 $\therefore \angle 2 = 90^\circ$ ($r \perp$ tangent)
 $\dots \textcircled{ii}$

From $\textcircled{i}, \textcircled{ii}$

$\angle 1 = \angle 2$

But this is possible only if O lies on PA

\therefore True.