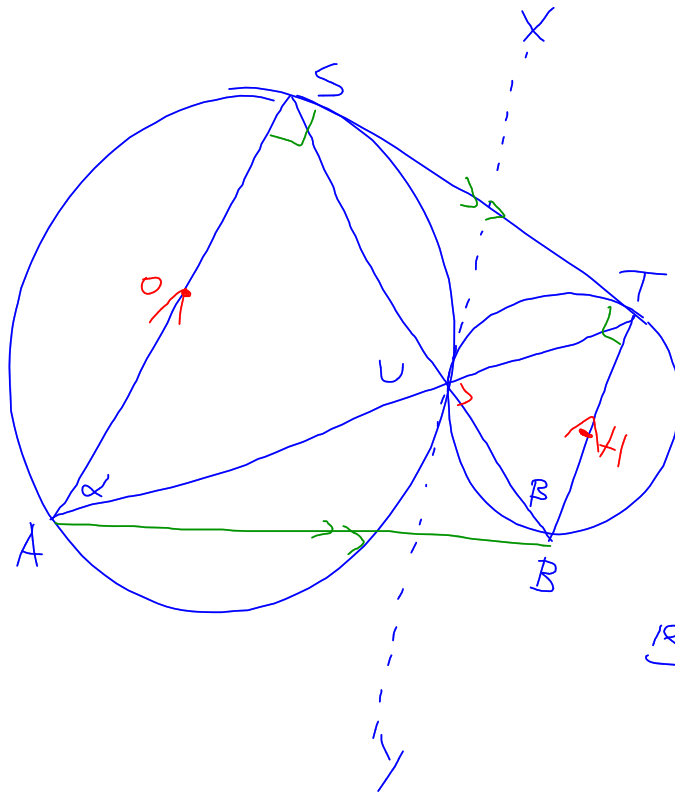


1



If AB tangent to both

then

STBA is rectangle.

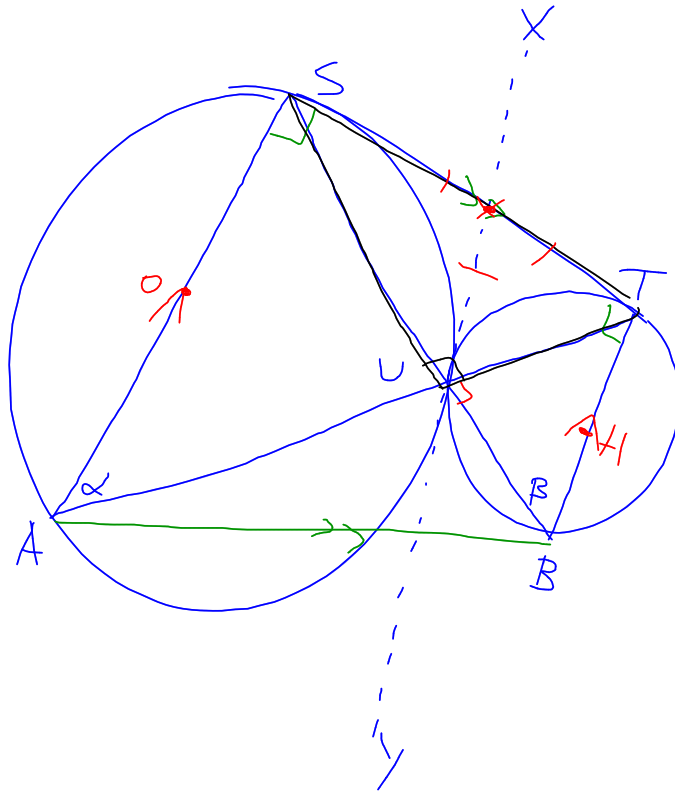
($\angle SAB = 90^\circ$)

\therefore diameters =

OR If diameters \neq

AB not tangent.

1



$$\angle SUT = 90^\circ$$

\therefore ST is diameter

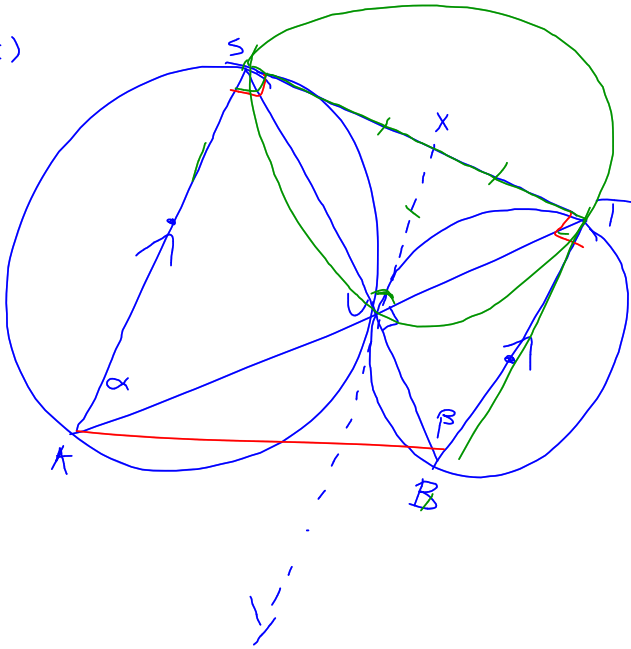
$$AS \perp ST$$

$$BT \perp ST$$

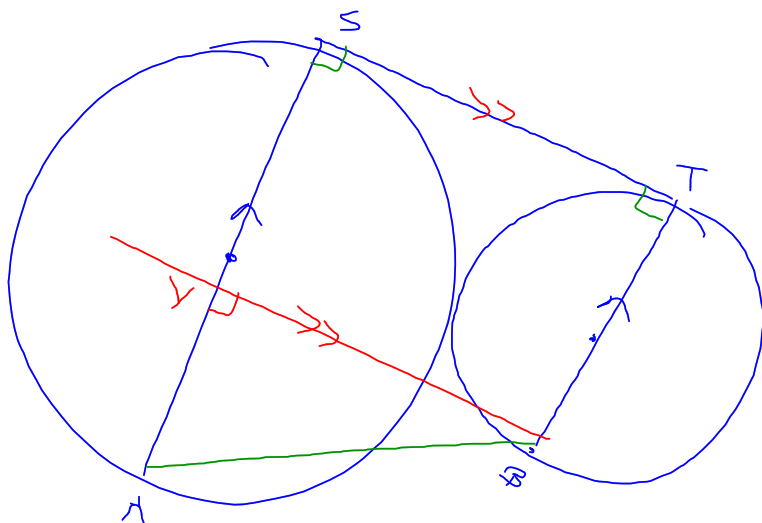
radius \perp tangent

\therefore AT & BT are tangent

12c)



12



Construct BY
 $\parallel TS$

$$\angle BYA = 90^\circ$$

(Corresponding \angle 's,
 $BY \parallel TS$)

$$\angle BAY + 90 + \angle YBA = 180$$

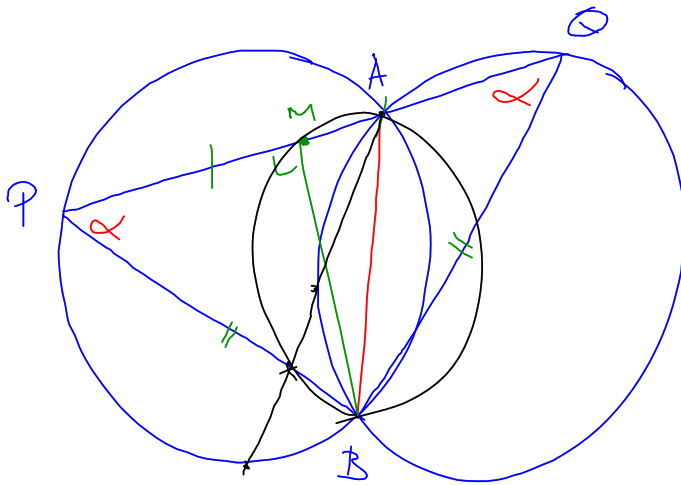
(\angle sum Δ)

$$\angle BAY + \angle YBA = 90$$

$$\angle BAY < 90$$

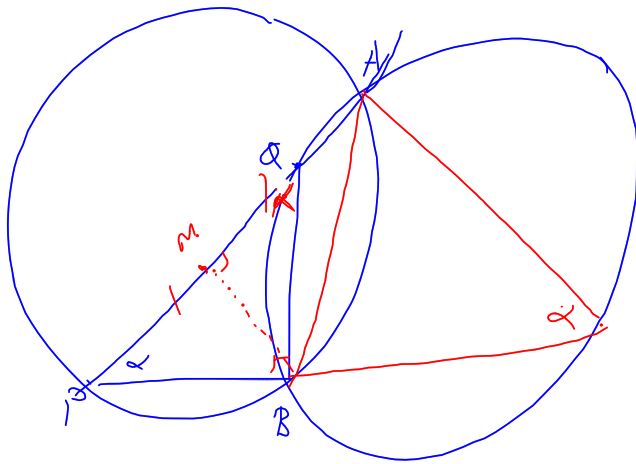
$\therefore YA$ not $\perp AB$

14

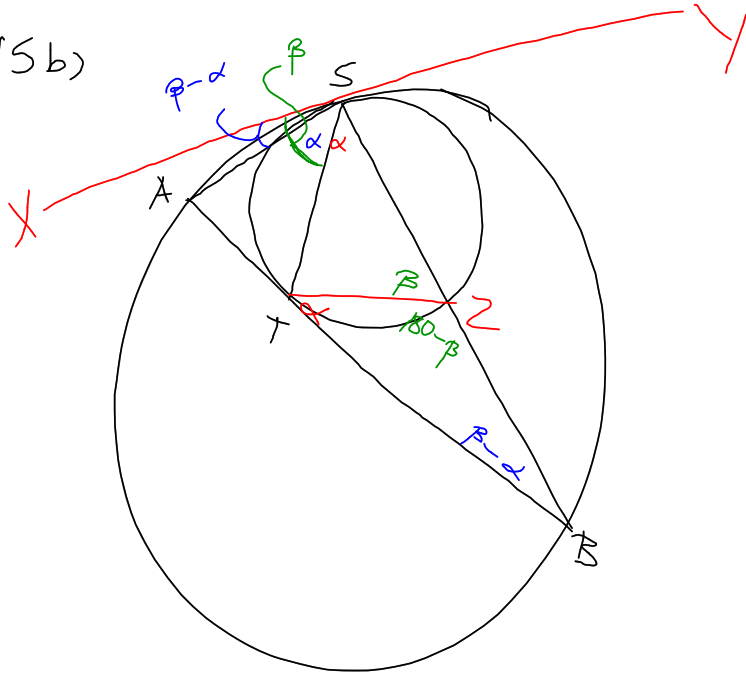


$\angle APB = \angle AQB = \alpha$
(= arcs subtend = \angle 's
at circumference
in = circles)

14d)



15b)



- ①
- ②
- ③

15b)

