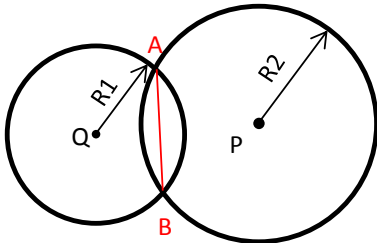


circle P and circle Q are externally tangent .AB is common external tangent if the radius of the circle P and Q are 8cm And 12cm respectively .find the length of the tangent segments AB.

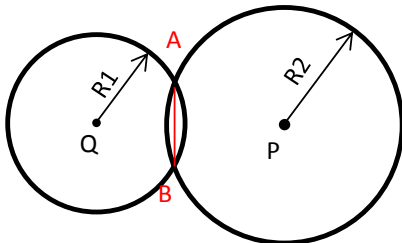
**Solution**

Draw two circles P and Q with radii 8 cm and 12 cm respectively with tangent AB.

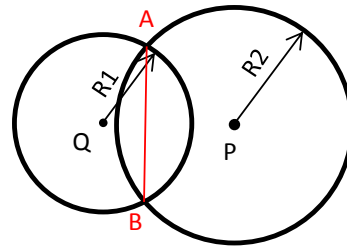


There are length  $AB=a$

So, we have only radii of the circles, options of the contact can be:



There are length  $AB=b$



There are length  $AB=c$

That is, as we see the length of the segment AB can be different and it independent of the radius circle. There are no further conditions.

**Answer**

No decision, as few conditions.