

# **Chapter 3 / Hoofstuk 3**

**GEOMETRICAL CONSTRUCTION – p. 17 - BOTTOM  
GEOMETRIESE KONSTRUKSIE – bl. 17 - ONDER**

# TANGENTIAL ARCS RULES

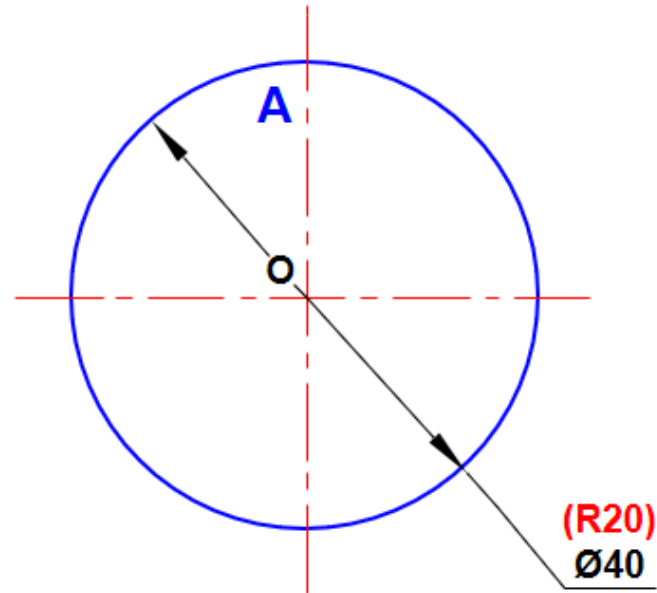
## RAAK BOË REËLS

INCLUDED CIRCLES = (-)  
INSLUITSIRKELS = (-)

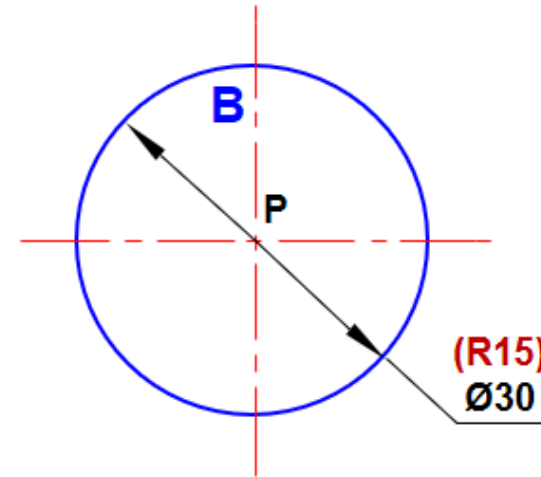
EXCLUDED CIRCLES = (+)  
UITSLUITSIRKELS = (+)

**NB! ALWAYS USE THE RADIUS**  
**NB! GEBRUIK ALTYD DIE RADIUS**

**Construct a tangential arc  
with a radius of 80mm to  
exclude circle A and  
include circle B**



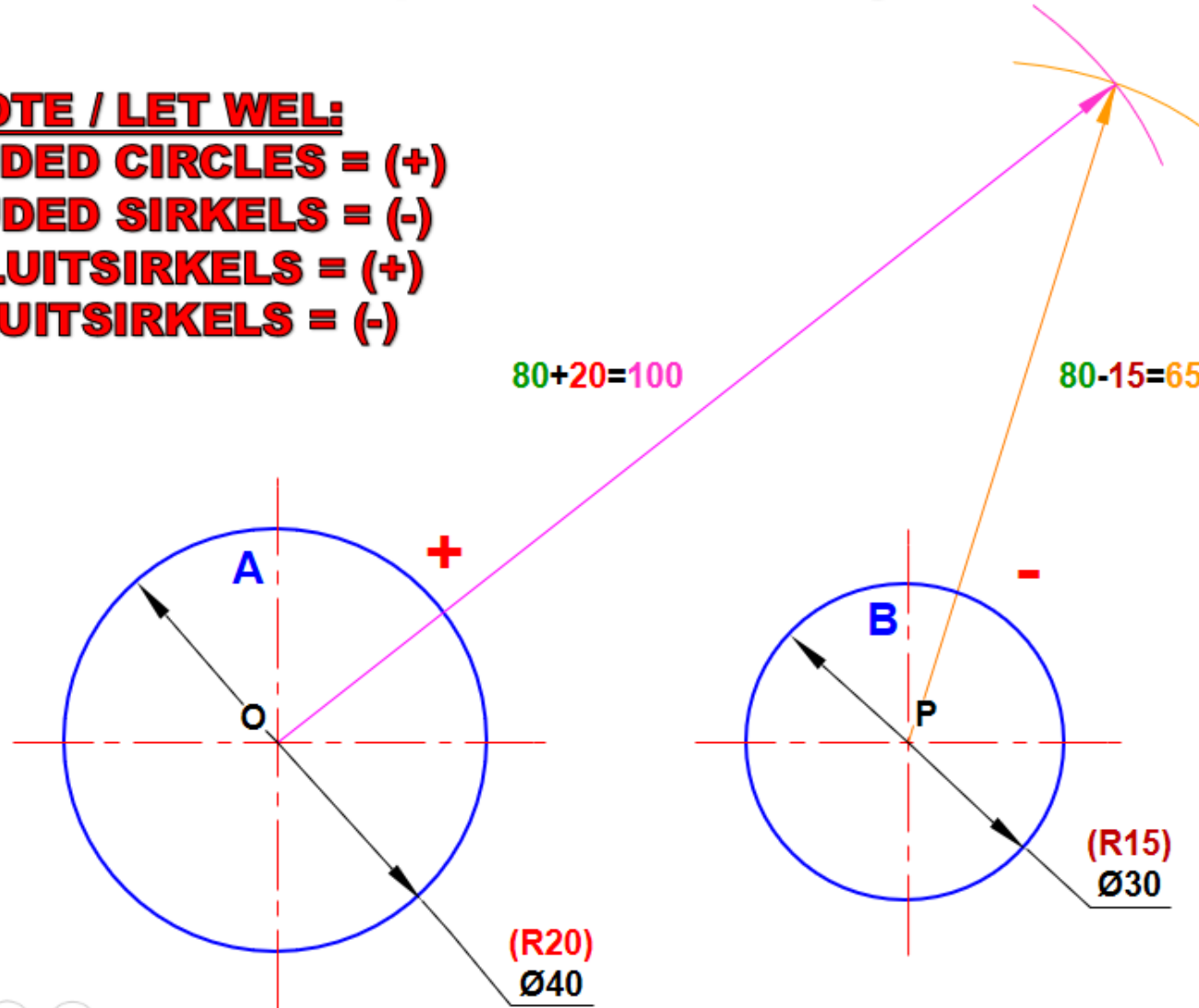
**Konstrueer 'n raakboog met  
'n radius van 80mm om  
sirkel A uit te sluit en sirkel  
B in te sluit**



**From centre point O, draw an arc with R100**  
**Vanaf middelpunt O, teken 'n boog met R100**

**From centre point P, draw an arc with R65**  
**Vanaf middelpunt P, teken 'n boog met R65**

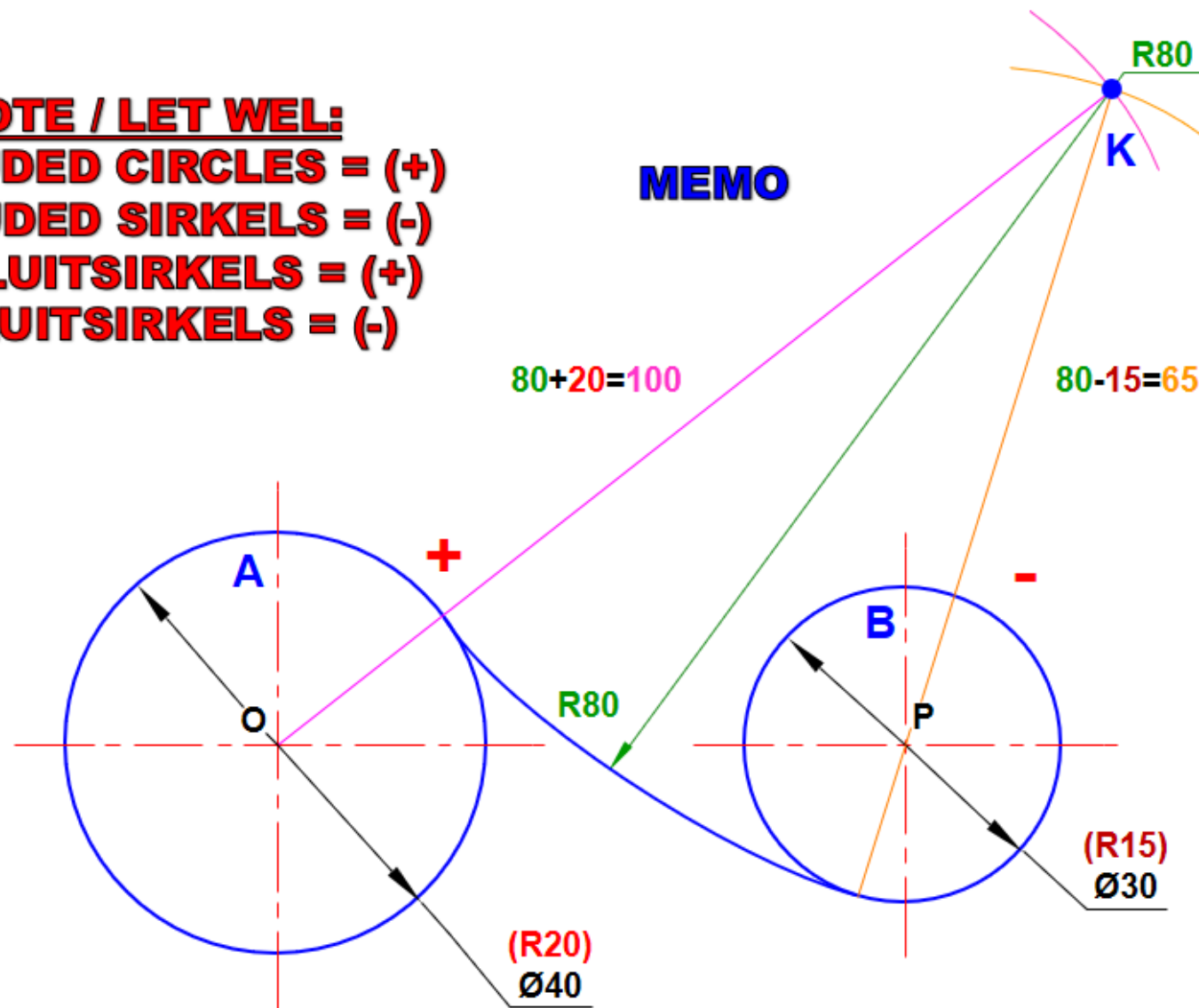
**NOTE / LET WEL:**  
**EXCLUDED CIRCLES = (+)**  
**INCLUDED SIRKELS = (-)**  
**UITSLUITSIRKELS = (+)**  
**INSLUITSIRKELS = (-)**



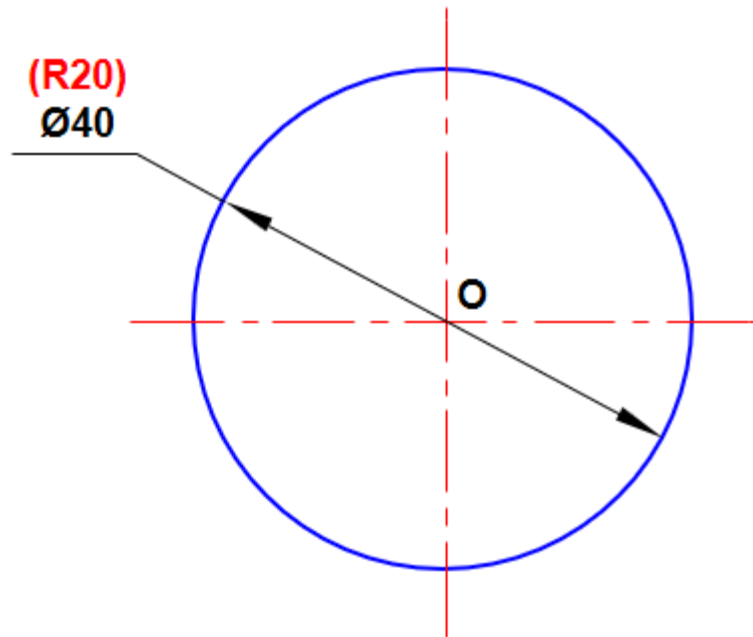
**From centre point K, draw a tangential arc with a radius of 80mm to exclude circle A and include circle B**

**Vanaf middelpunt K, teken 'n raakboog met 'n radius van 80mm om sirkel A uit te sluit en sirkel B in te sluit**

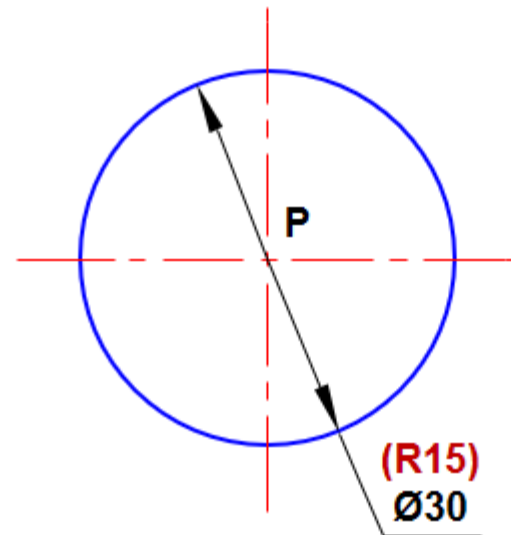
**NOTE / LET WEL:**  
**EXCLUDED CIRCLES = (+)**  
**INCLUDED SIRKELS = (-)**  
**UITSLUIJSIRKELS = (+)**  
**INSLUIJSIRKELS = (-)**



**Construct a tangential arc  
with a radius of 80mm to  
include circle A and  
exclude circle B**



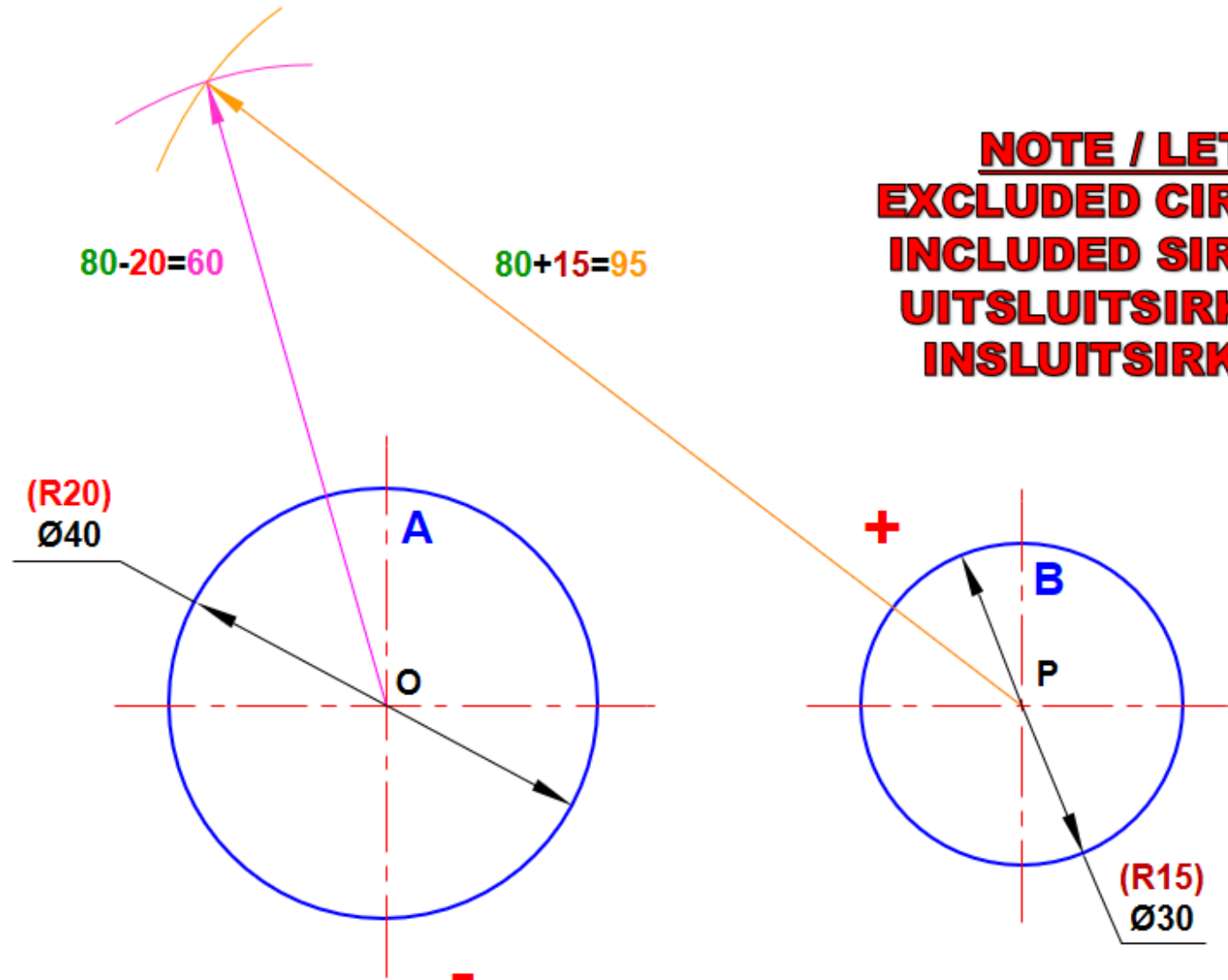
**Konstrueer 'n raakboog met  
'n radius van 80mm om  
sirkel A in te sluit en sirkel  
B uit te sluit**



From centre point O, draw an arc with R60  
Vanaf middelpunt O, teken 'n boog met R60



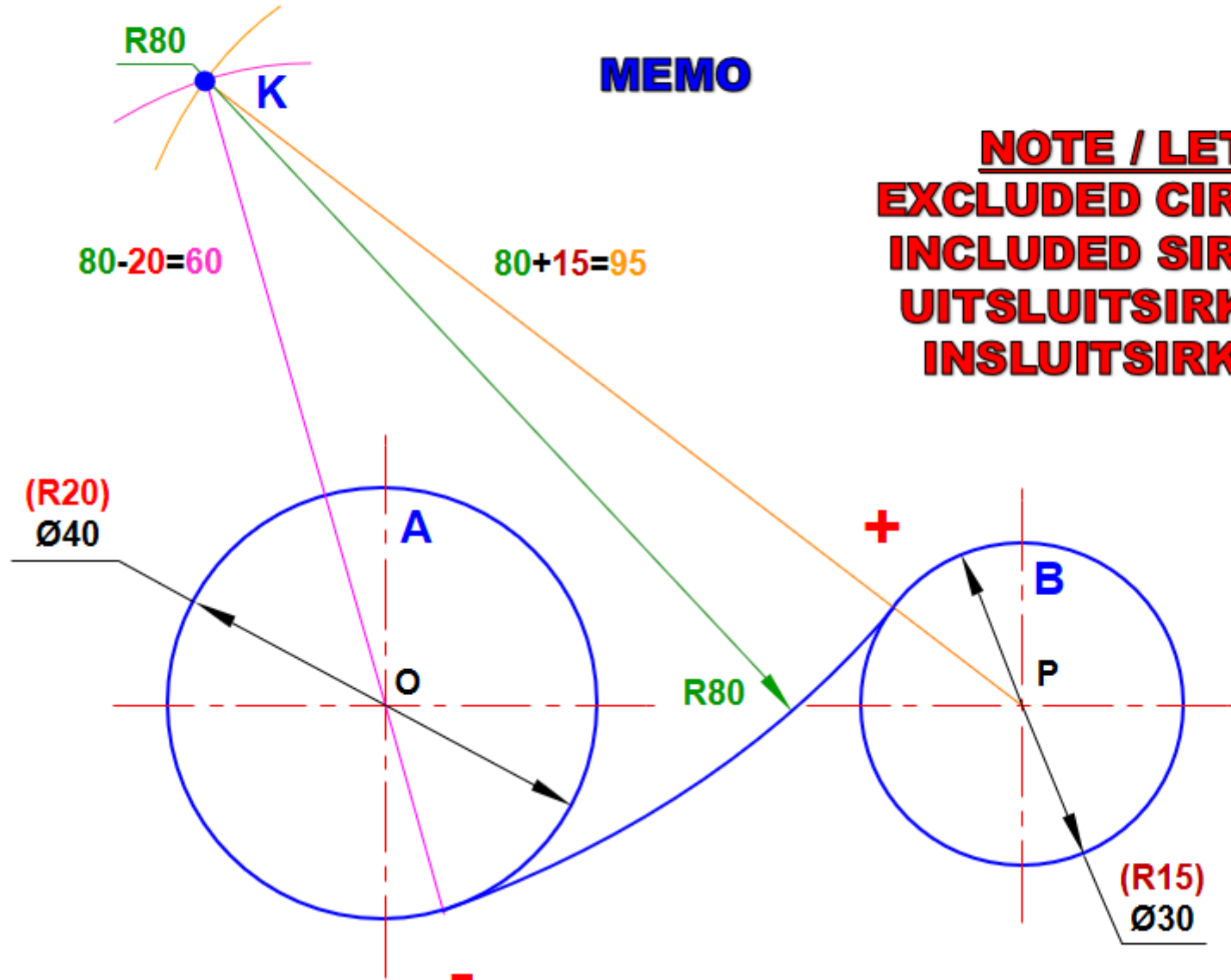
From centre point P, draw an arc with R95  
Vanaf middelpunt P, teken 'n boog met R95



**NOTE / LET WEL:**  
**EXCLUDED CIRCLES = (+)**  
**INCLUDED SIRKELS = (-)**  
**UITSLUITSIRKELS = (+)**  
**INSLUITSIRKELS = (-)**

From centre point K, draw a tangential arc with a radius of 80mm to include circle A and exclude circle B

Vanaf middelpunt K, teken 'n raakboog met 'n radius van 80mm om sirkel A in te sluit en sirkel B uit te sluit



**NOTE / LET WEL:**  
EXCLUDED CIRCLES = (+)  
INCLUDED SIRKELS = (-)  
UITSLUIJSIRKELS = (+)  
INSLUIJSIRKELS = (-)