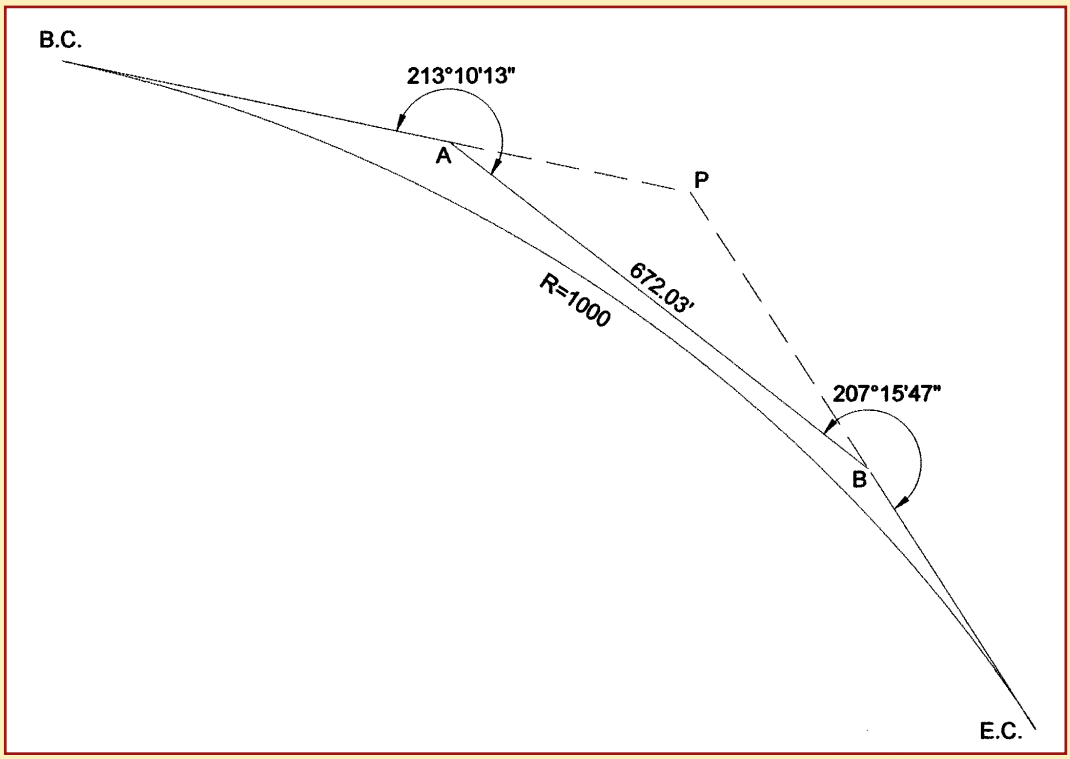
Solution to Problem 27



SOLVE FOR ANGLE AT P: 180° - 33° 10'13" - 27°15'47" =119°34'00"

SOLVE TRIANGLE APB BY THE LAW OF SINES:

$$\frac{AP}{\sin 27°15'47"} = \frac{PB}{\sin 33°10'13"} = \frac{AB}{\sin 119°34'00"}$$

AP = 353.929' , PB = 422.735'

A 1000' RADIUS CURVE WITH A CENTRAL ANGLE OF 60°26'00"

(DERIVED FROM THE DEFLECTION AT P OR 180° - 119°34'00")

HAS A SEMI-TANGENT OF 582.403' (1000 tan 30°13'00")

B.C. TO A = 582.403' - 353.929' = 228.474'

B TO E.C. = 582.403' - 422.735' = 159.668'