

P • A • R • T

3 THREE

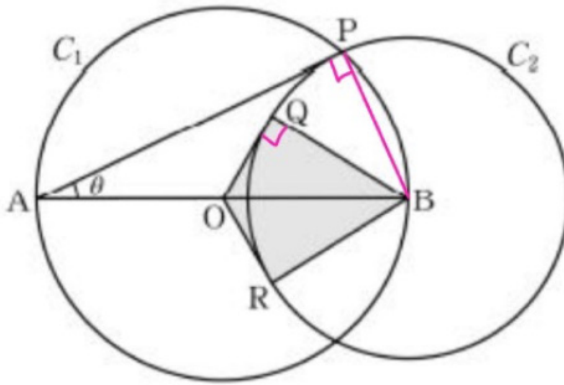
정석해설

식을 정석적으로 세우고, 계산 시에는 기본 근사만을 활용했습니다.

몇몇 문제 중 정석 풀이가 과하게 식이 긴 경우,

근사로 푸시길 권장하는 의미에서 풀이를 생략했으니 참고하시길 바랍니다.

▲ $\theta - d$ 예제 2



$\frac{1}{2} \frac{d}{d\theta} \overline{AB} = 2$
 $\lim_{\theta \rightarrow 0^+} \frac{S(\theta)}{\theta} = ?$

$\textcircled{A} : \begin{array}{c} Q \\ \diagup \quad \diagdown \\ O \quad B \\ \diagdown \quad \diagup \\ R \end{array} \rightsquigarrow \textcircled{N} \left[\begin{array}{l} \overline{QB} \dots \textcircled{1} \\ \overline{OQ} \dots \textcircled{2} \end{array} \right.$

$\overline{QB} = \overline{PB} = 2\sin\theta \approx 2\theta \dots \textcircled{1} \text{ 해결}$

$\begin{array}{c} Q \\ \diagup \quad \diagdown \\ O \quad B \\ \diagdown \quad \diagup \end{array} \quad ; \quad \overline{OQ} = \sqrt{1 - 4\sin^2\theta} \approx 1 \dots \textcircled{2} \text{ 해결}$

$\therefore S(\theta) \approx 2 \times \frac{1}{2} \times 2\theta \times 1 = \boxed{2\theta} \rightarrow \boxed{2} \text{ 답}$