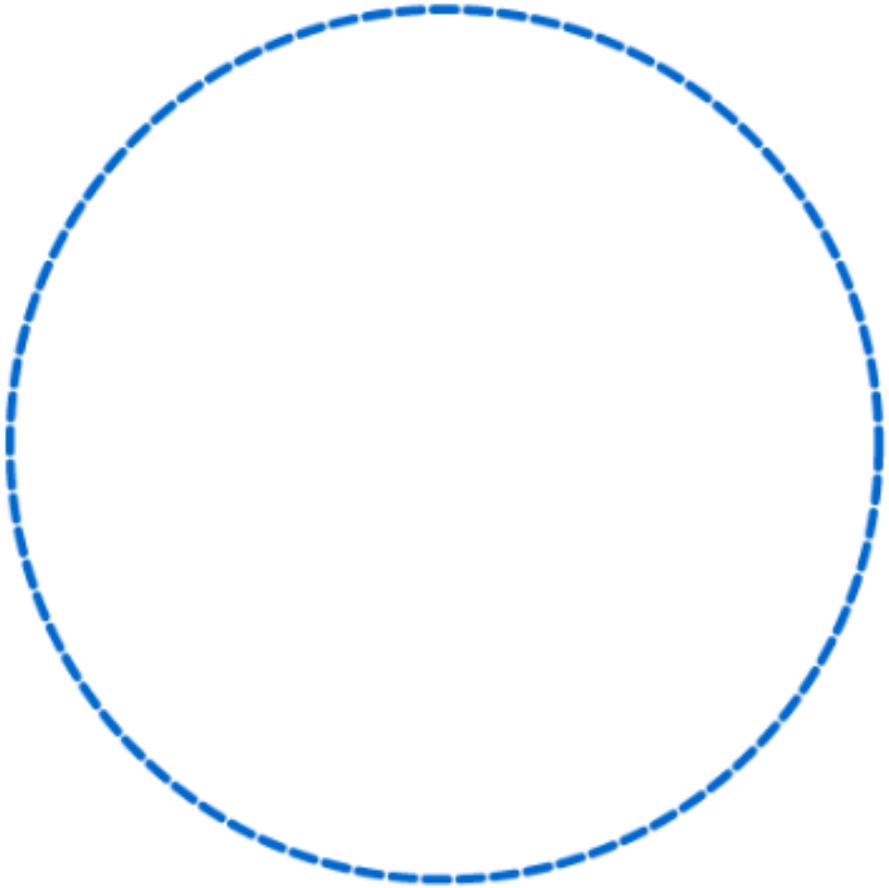
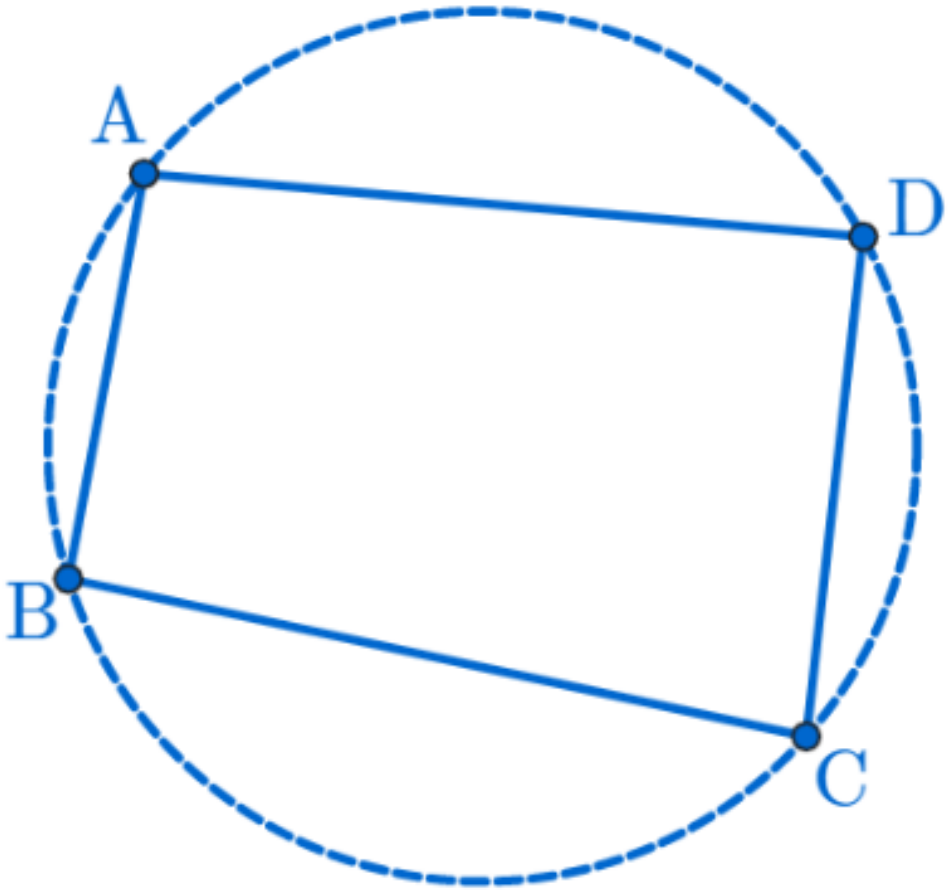
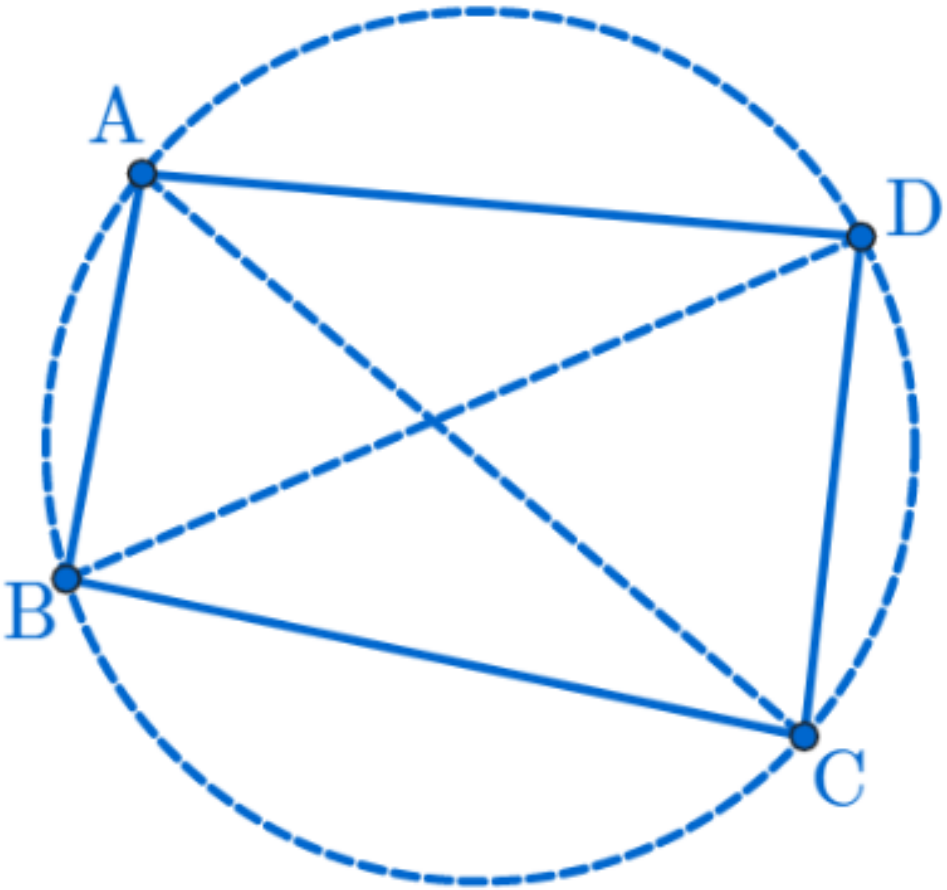
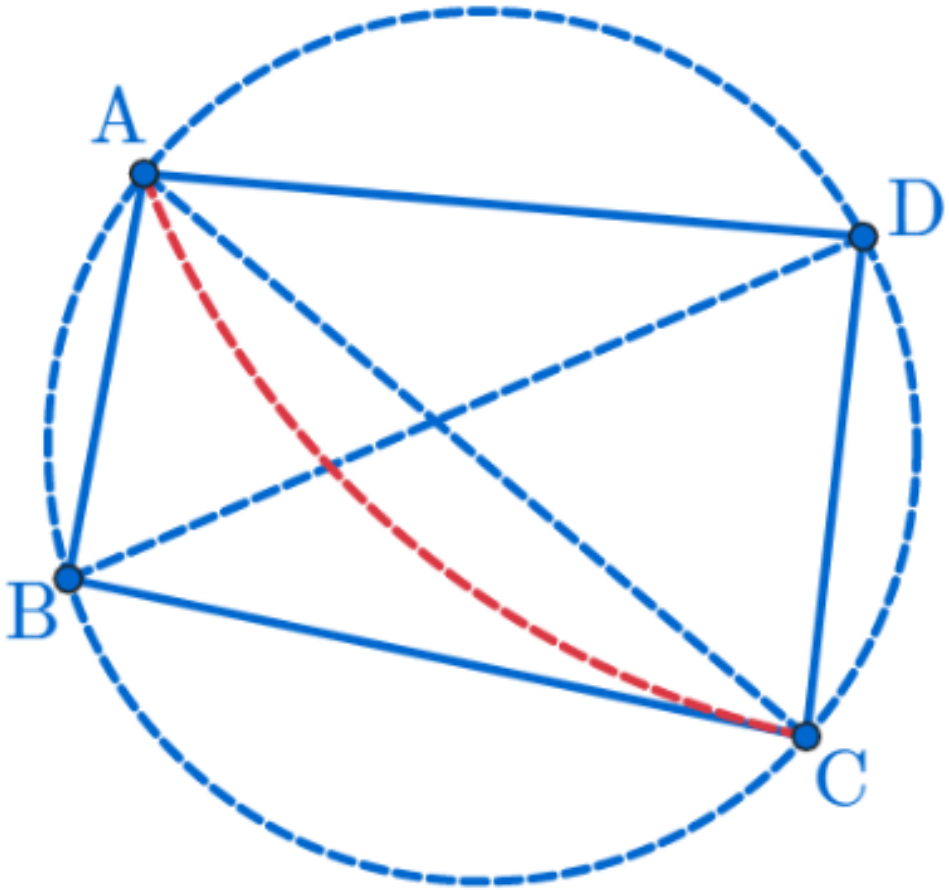
톨레미의 정리
(Ptolemy's theorem)

Ptolemy's theorem

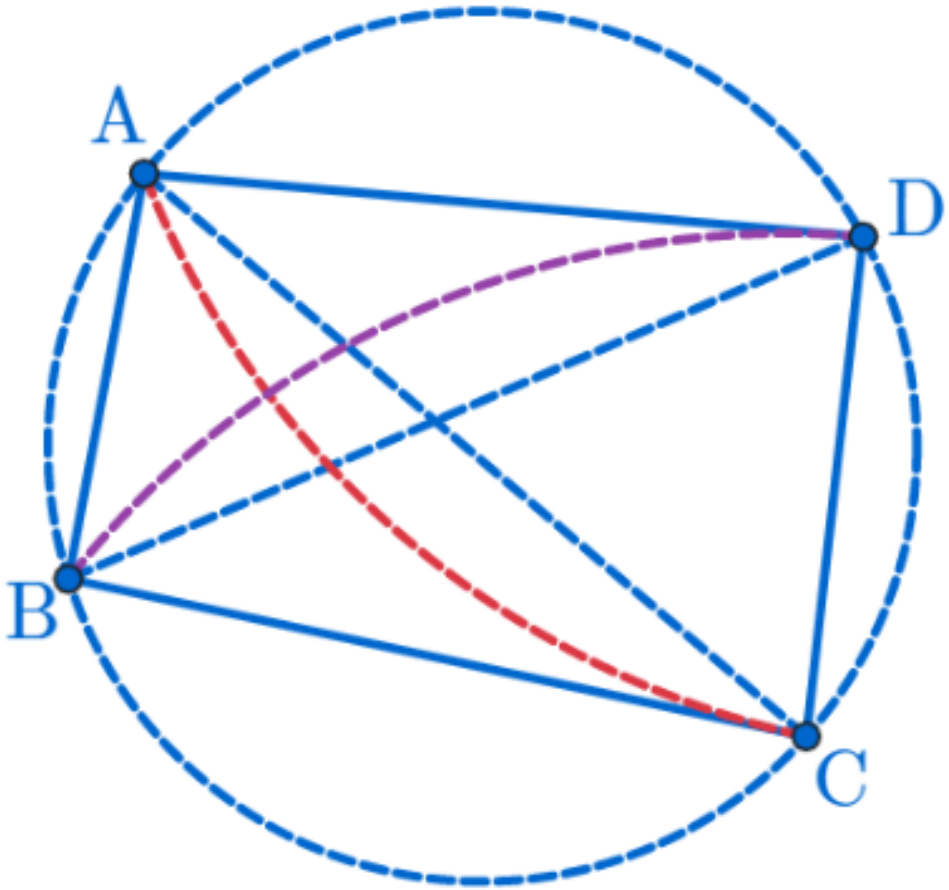



A
D
B
C

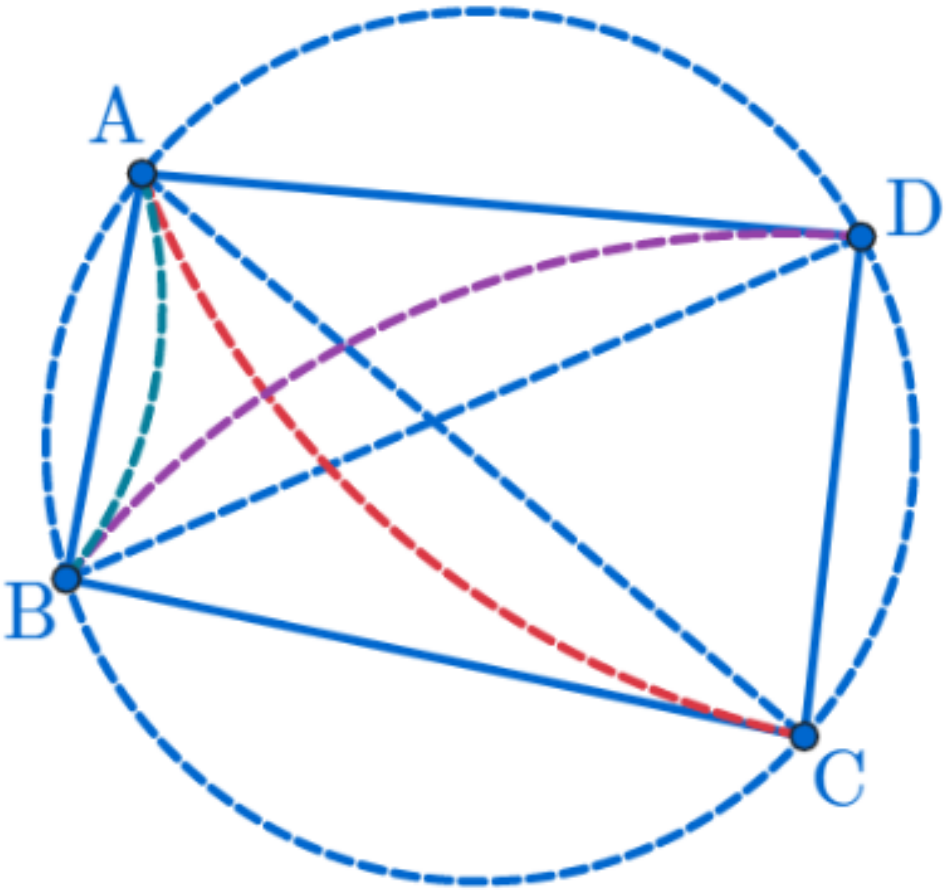

A
D
B
C



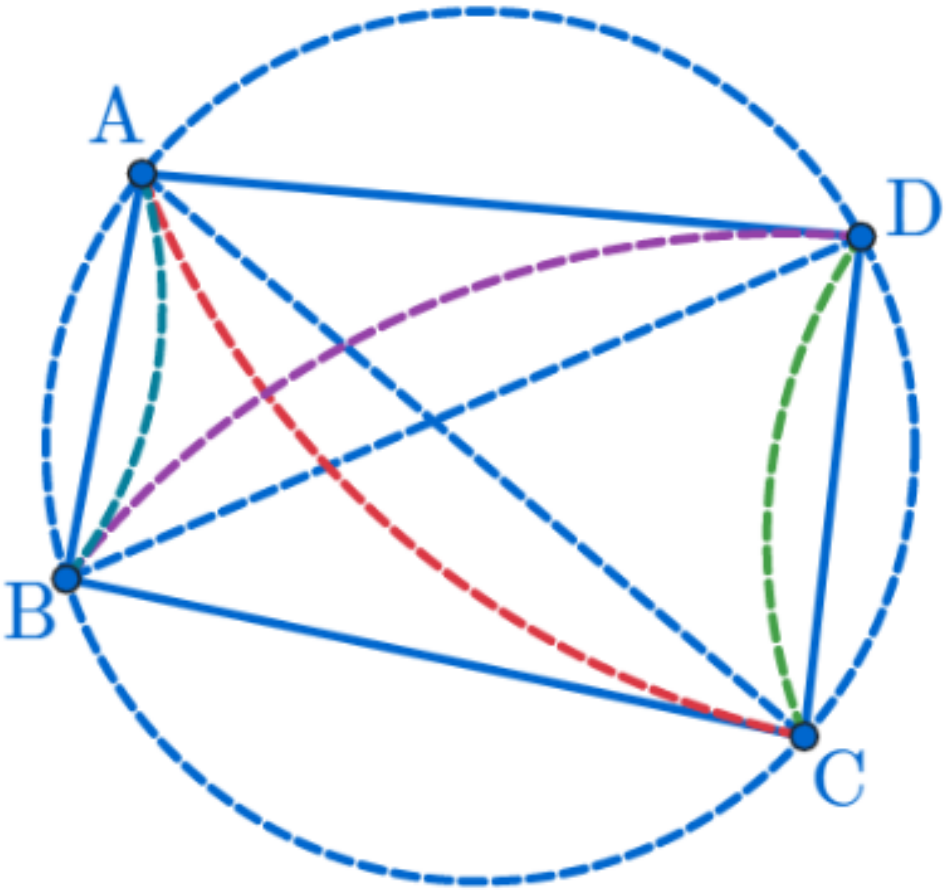
$\overline{AC}$



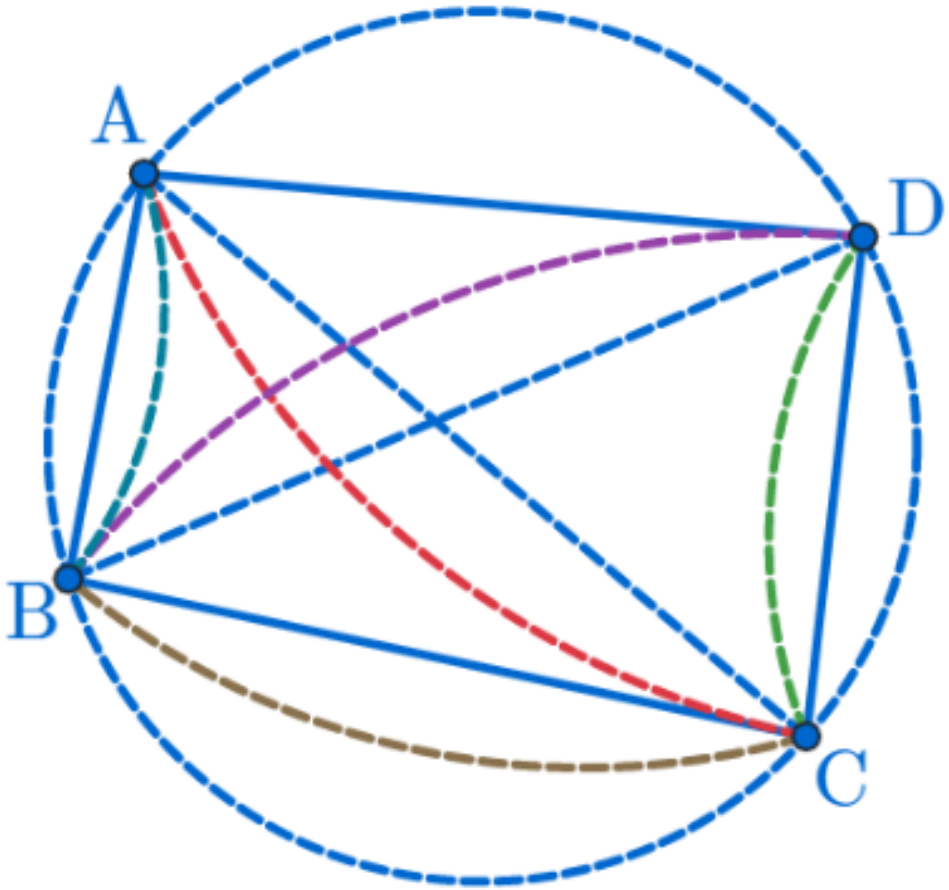
$\overline{AC} \cdot \overline{BD}$



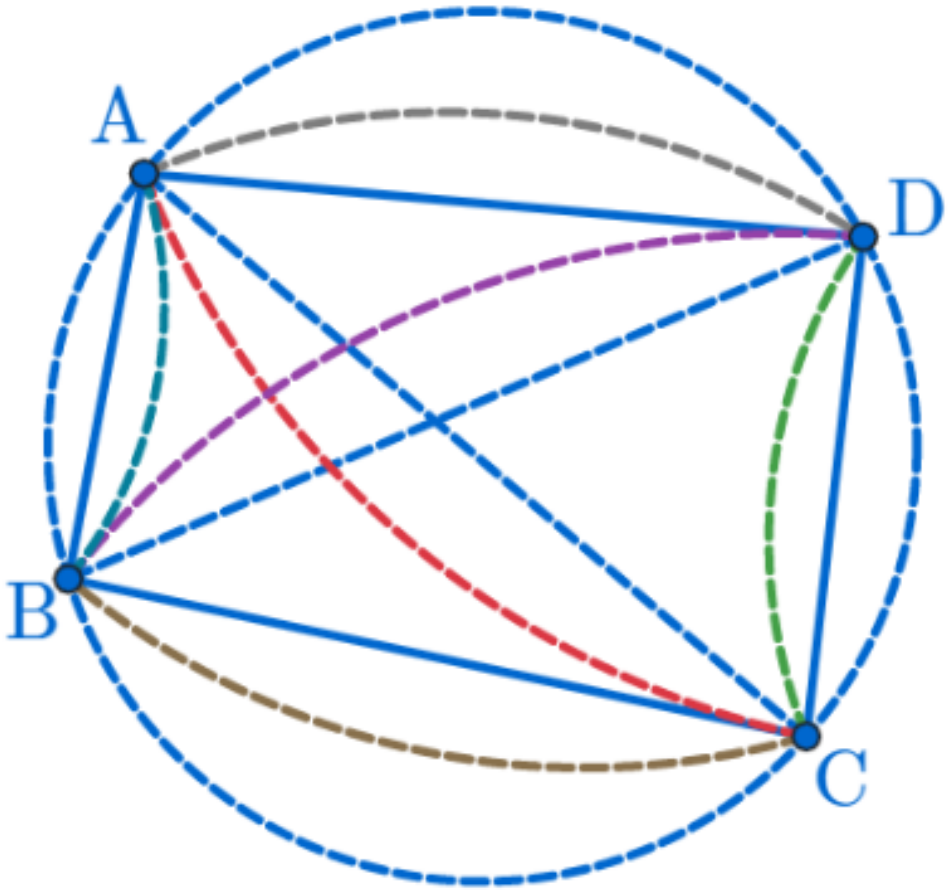
$$\overline{AC} \cdot \overline{BD} = \overline{AB}$$



$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD}$$

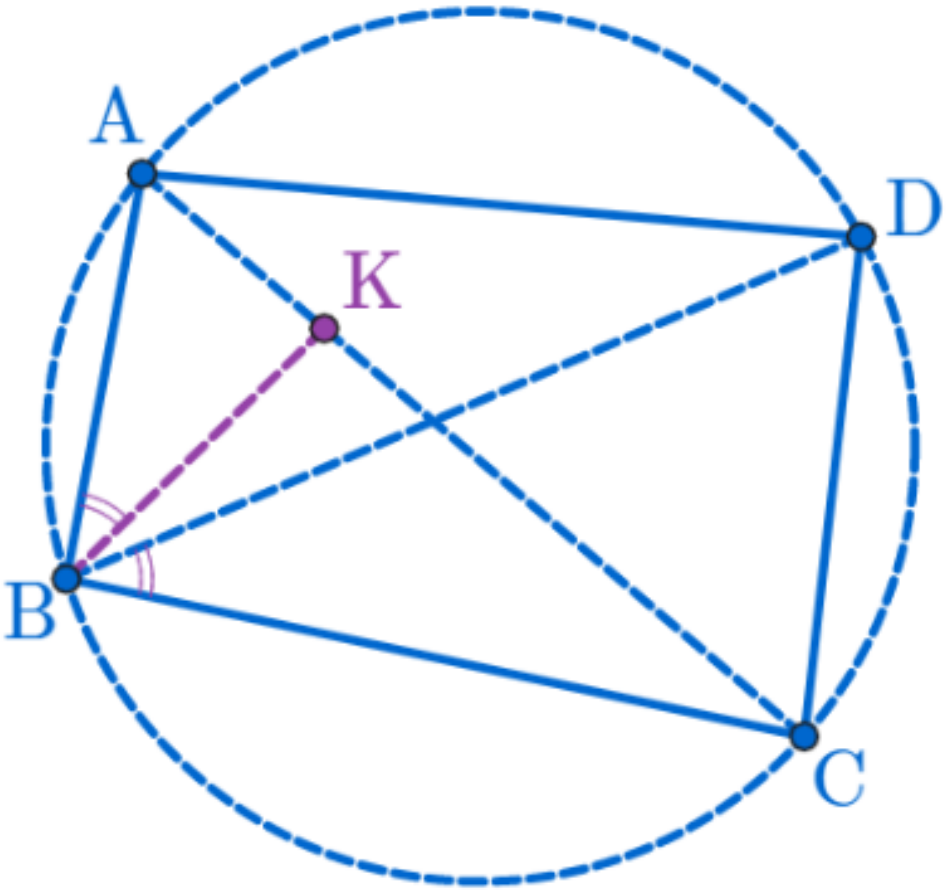


$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC}$$

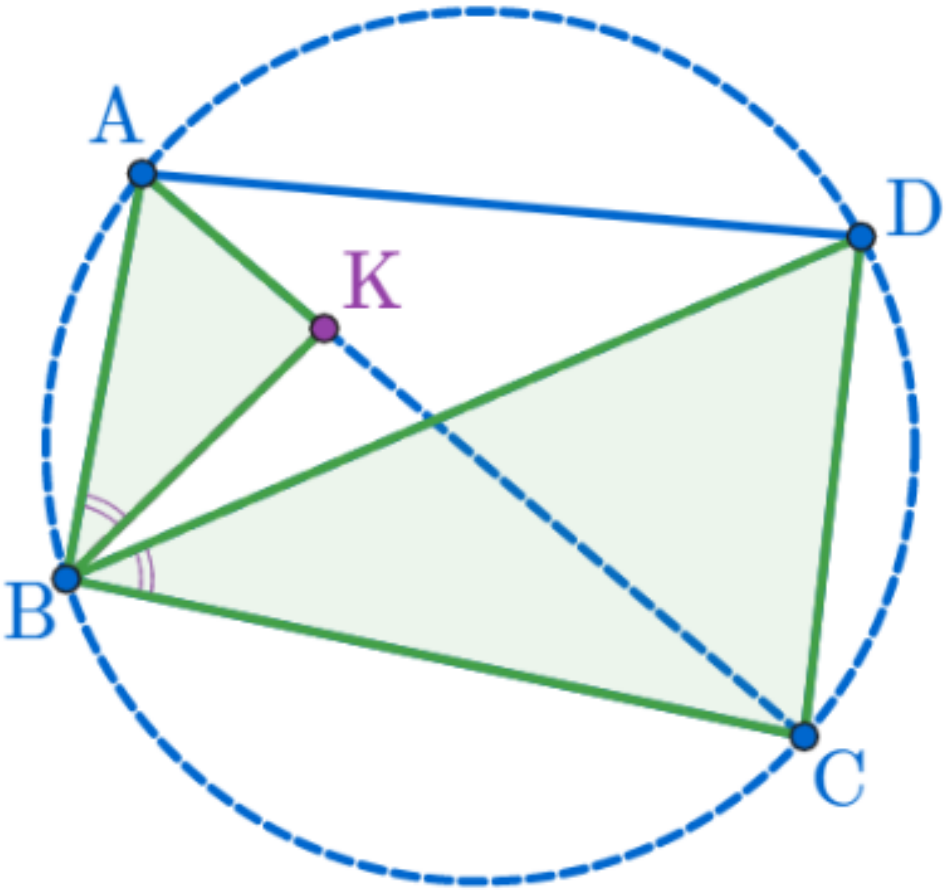


$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC} \cdot \overline{DA}$$

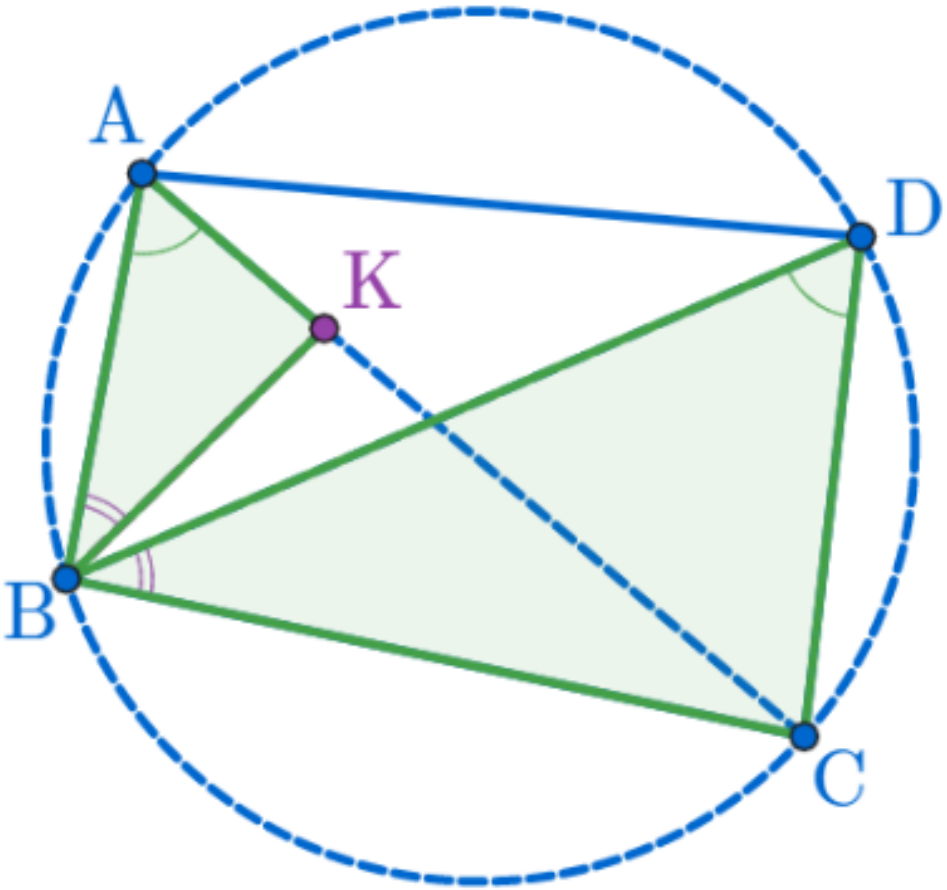
Ptolemy's theorem



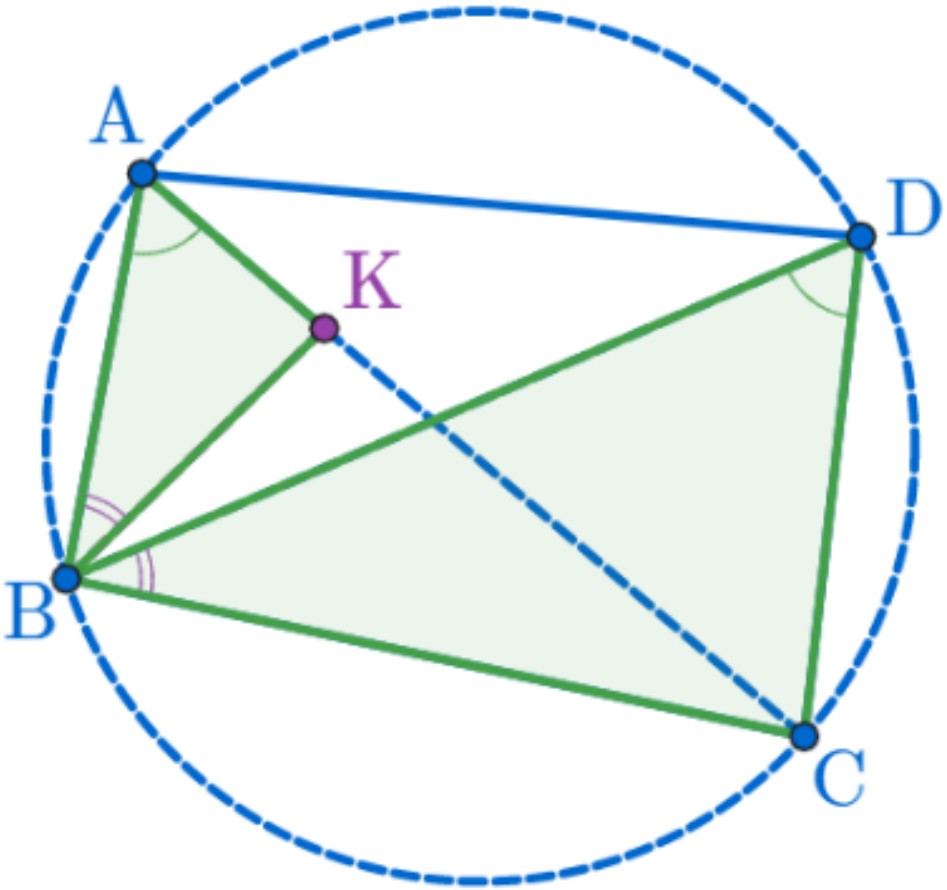
$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC} \cdot \overline{DA}$$



$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC} \cdot \overline{DA}$$

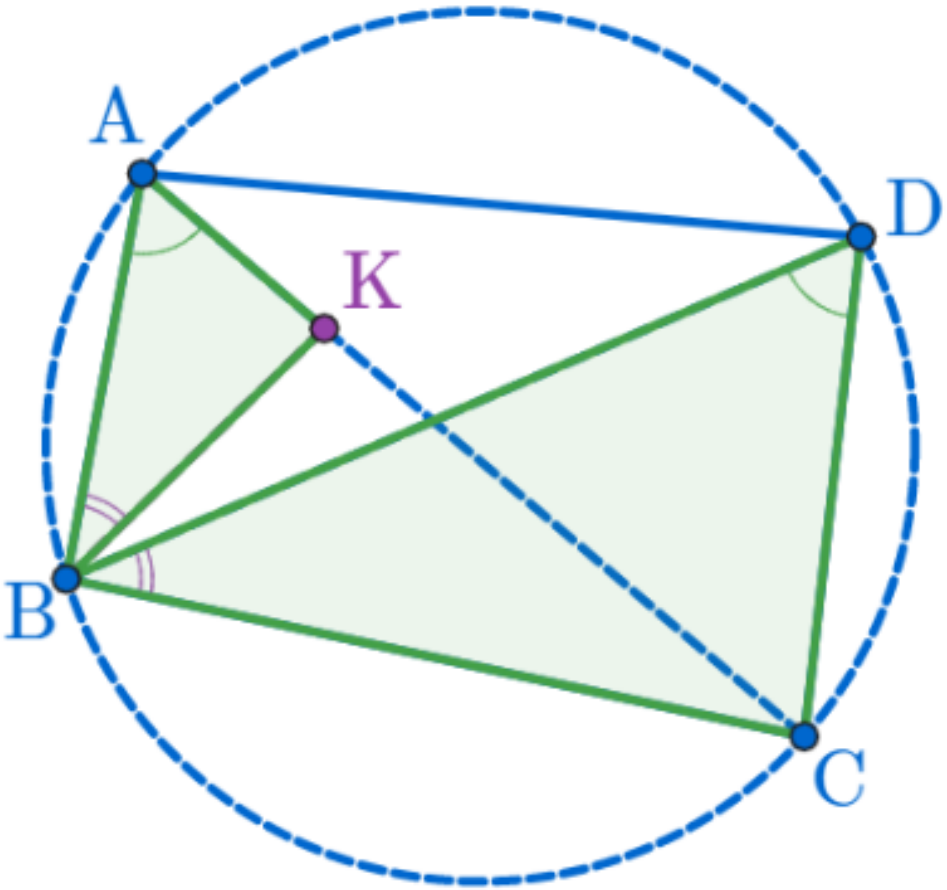


$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC} \cdot \overline{DA}$$



$$\overline{AB} : \overline{AK} = \overline{BD} : \overline{CD}$$

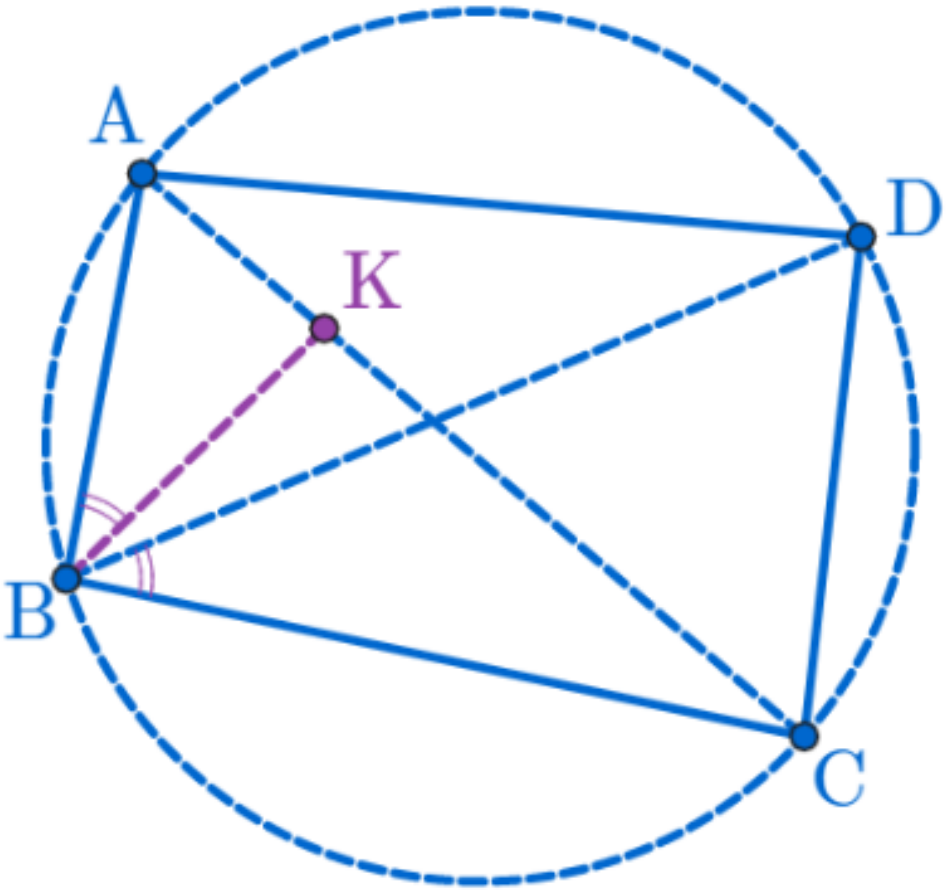
$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC} \cdot \overline{DA}$$



$$\overline{AB} : \overline{AK} = \overline{BD} : \overline{CD}$$

$$\overline{AK} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD}$$

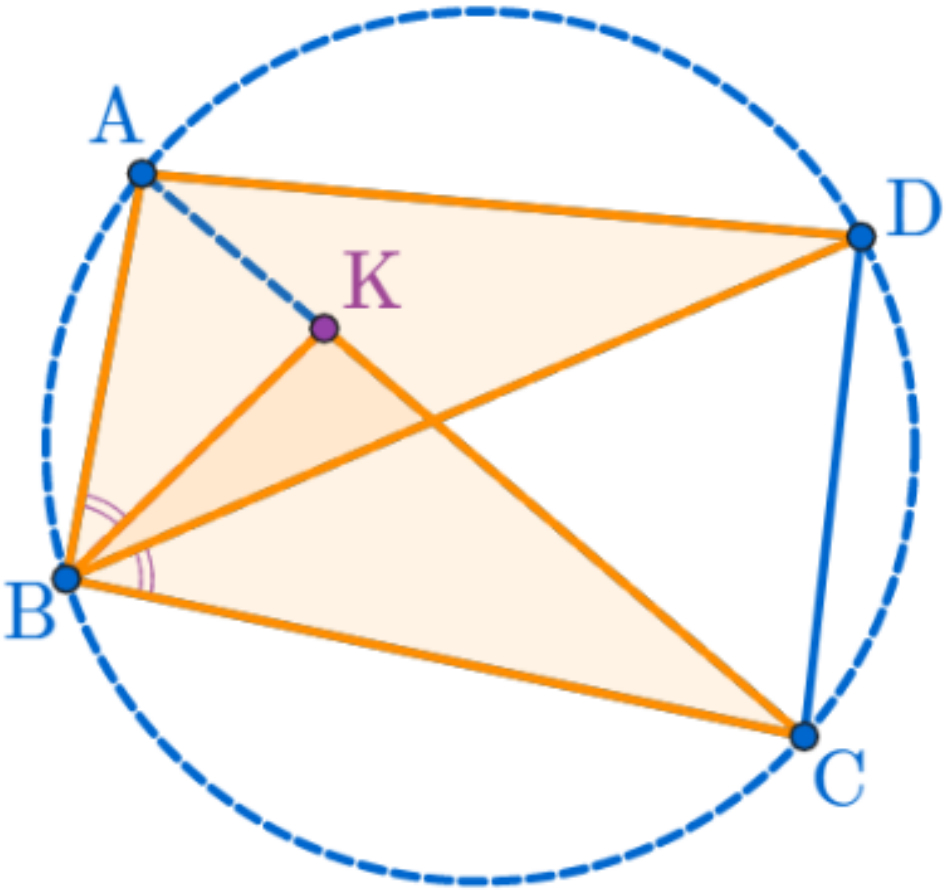
$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC} \cdot \overline{DA}$$



$$\overline{AB} : \overline{AK} = \overline{BD} : \overline{CD}$$

$$\overline{AK} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD}$$

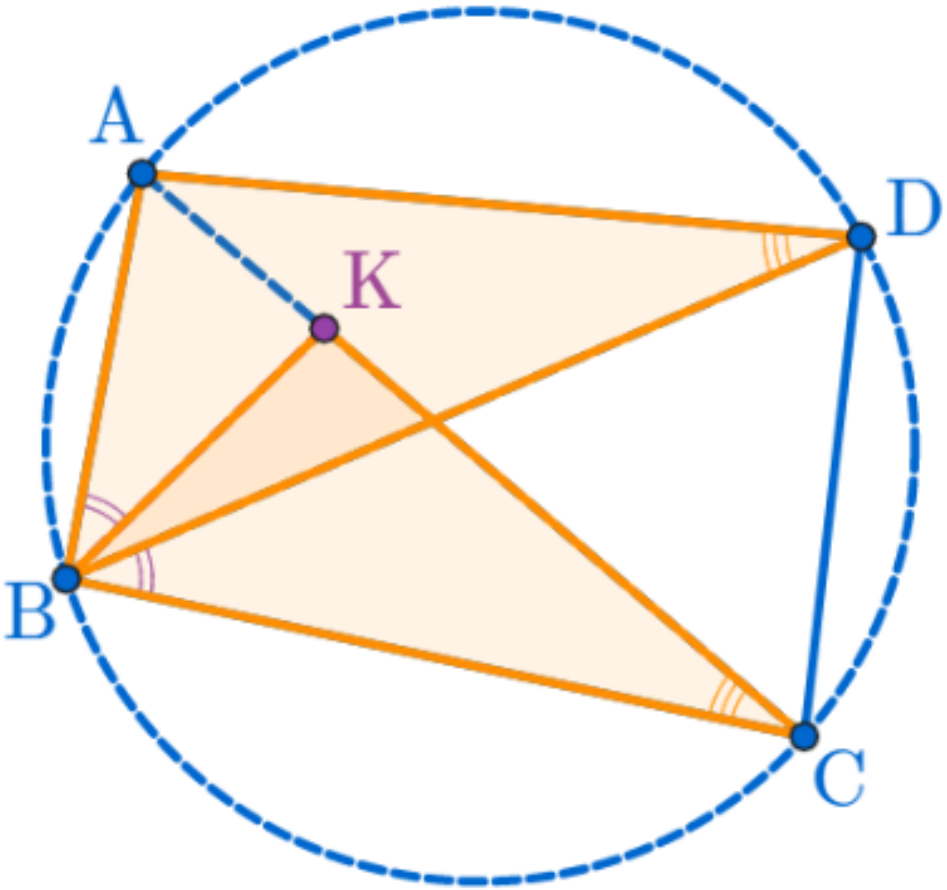
$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC} \cdot \overline{DA}$$



$$\overline{AB} : \overline{AK} = \overline{BD} : \overline{CD}$$

$$\overline{AK} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD}$$

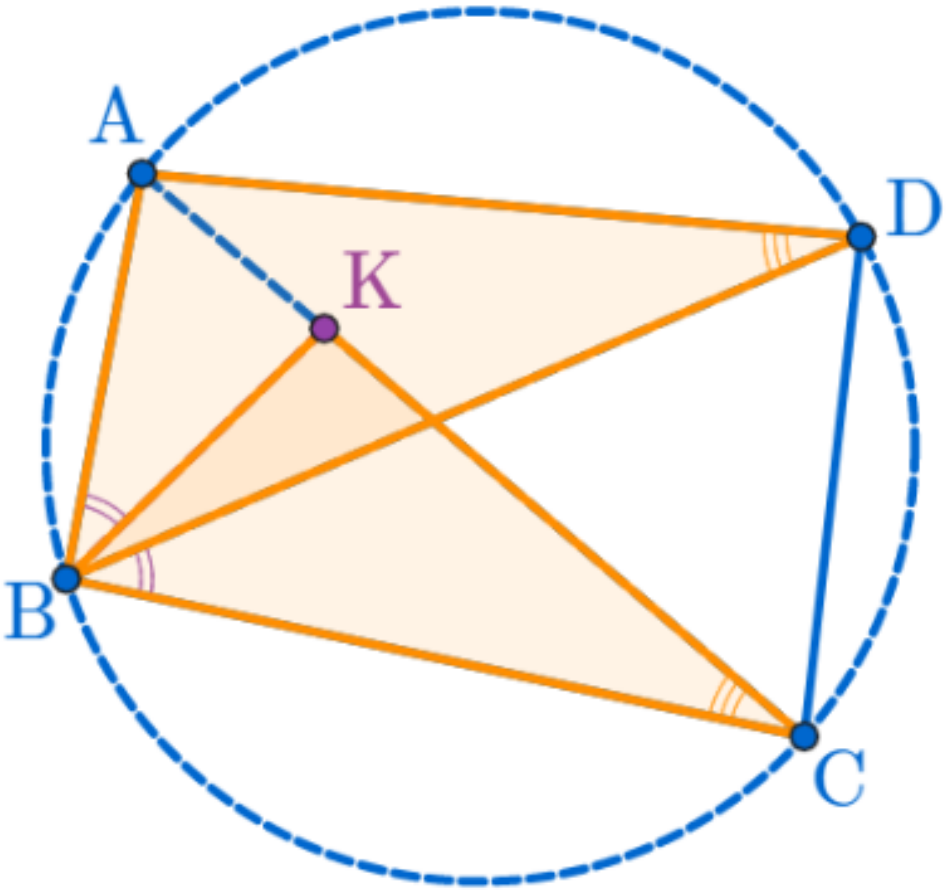
$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC} \cdot \overline{DA}$$



$$\overline{AB} : \overline{AK} = \overline{BD} : \overline{CD}$$

$$\overline{AK} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD}$$

$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC} \cdot \overline{DA}$$

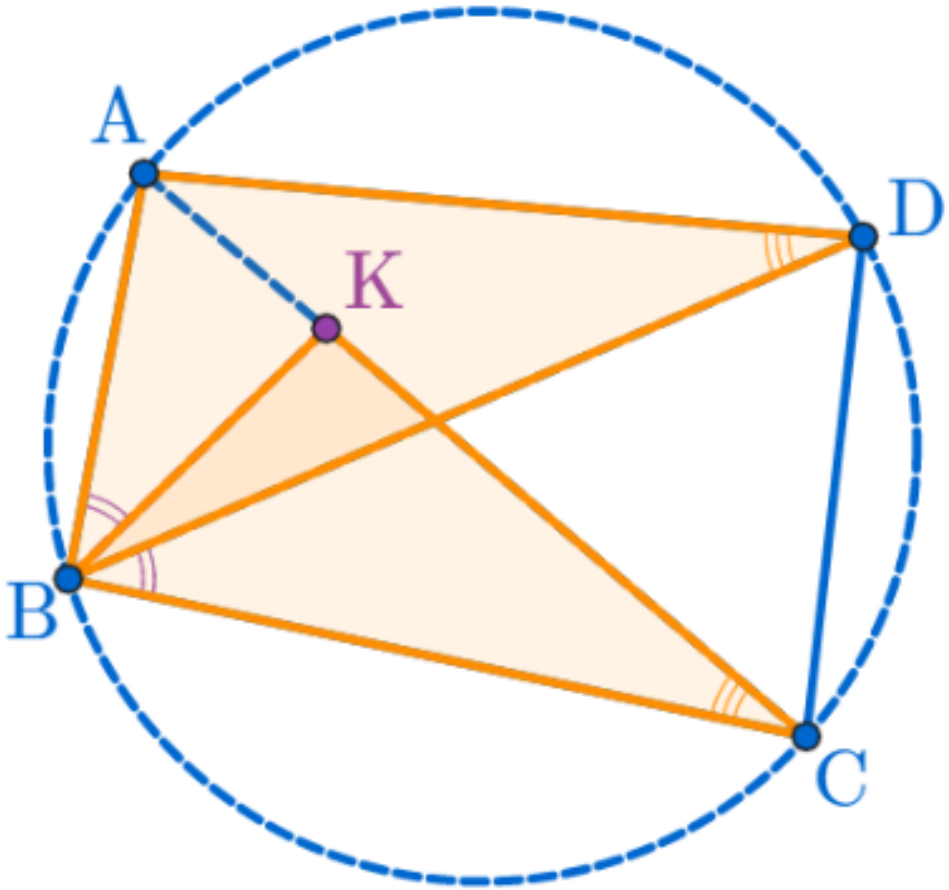


$$\overline{AB} : \overline{AK} = \overline{BD} : \overline{CD}$$

$$\overline{AK} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD}$$

$$\overline{DA} : \overline{BD} = \overline{KC} : \overline{BC}$$

$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC} \cdot \overline{DA}$$



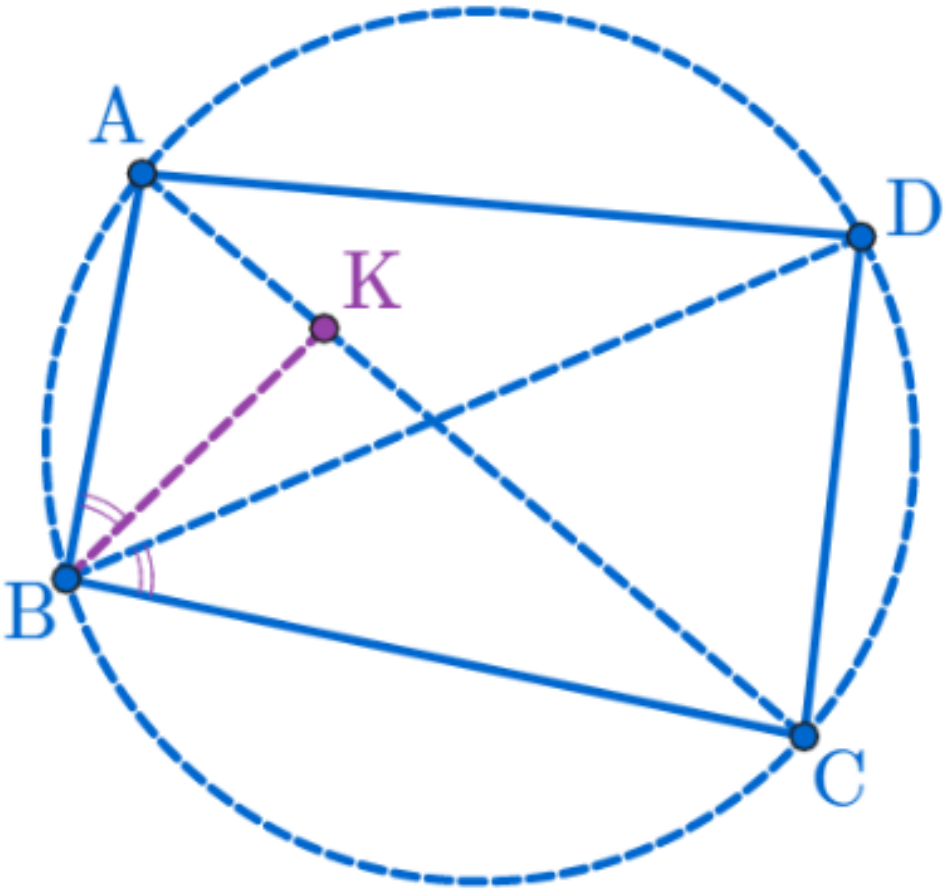
$$\overline{AB} : \overline{AK} = \overline{BD} : \overline{CD}$$

$$\overline{AK} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD}$$

$$\overline{DA} : \overline{BD} = \overline{KC} : \overline{BC}$$

$$\overline{KC} \cdot \overline{BD} = \overline{BC} \cdot \overline{DA}$$

$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC} \cdot \overline{DA}$$



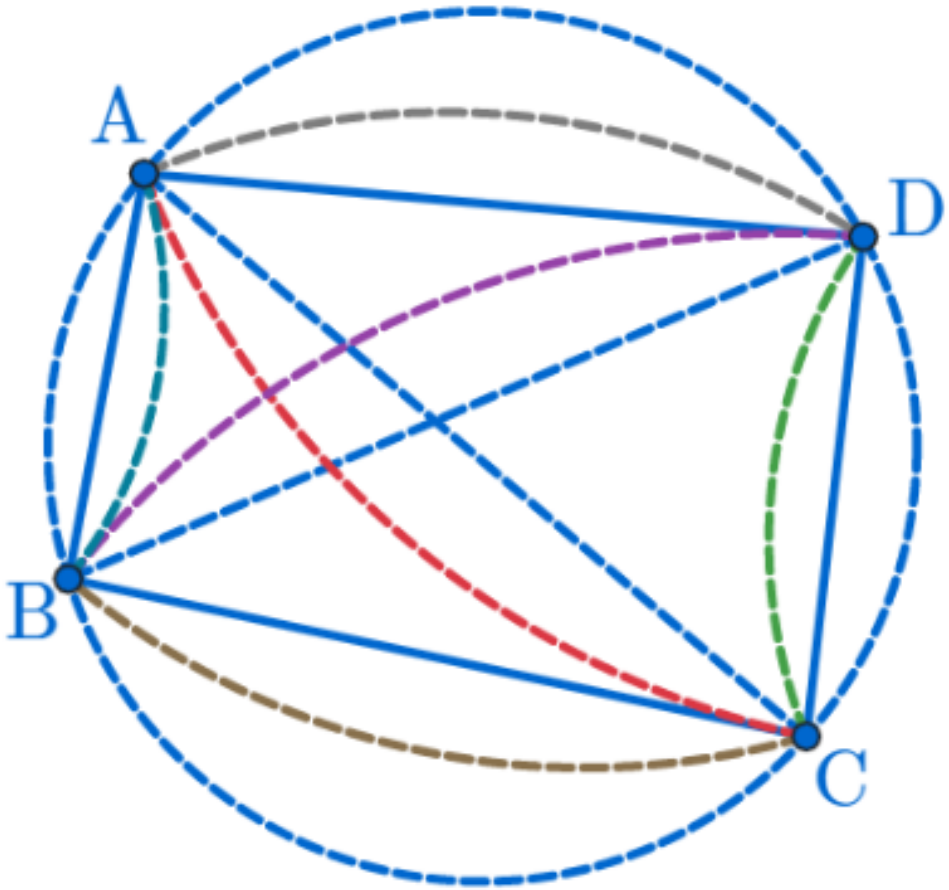
$$\overline{AB} : \overline{AK} = \overline{BD} : \overline{CD}$$

$$\overline{AK} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD}$$

$$\overline{DA} : \overline{BD} = \overline{KC} : \overline{BC}$$

$$\overline{KC} \cdot \overline{BD} = \overline{BC} \cdot \overline{DA}$$

$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC} \cdot \overline{DA}$$



$$\overline{AC} \cdot \overline{BD} = \overline{AB} \cdot \overline{CD} + \overline{BC} \cdot \overline{DA}$$

Github:
https://min7014.github.io/math20200318001.html

Click or paste URL into the URL search bar, and you can see a picture moving.