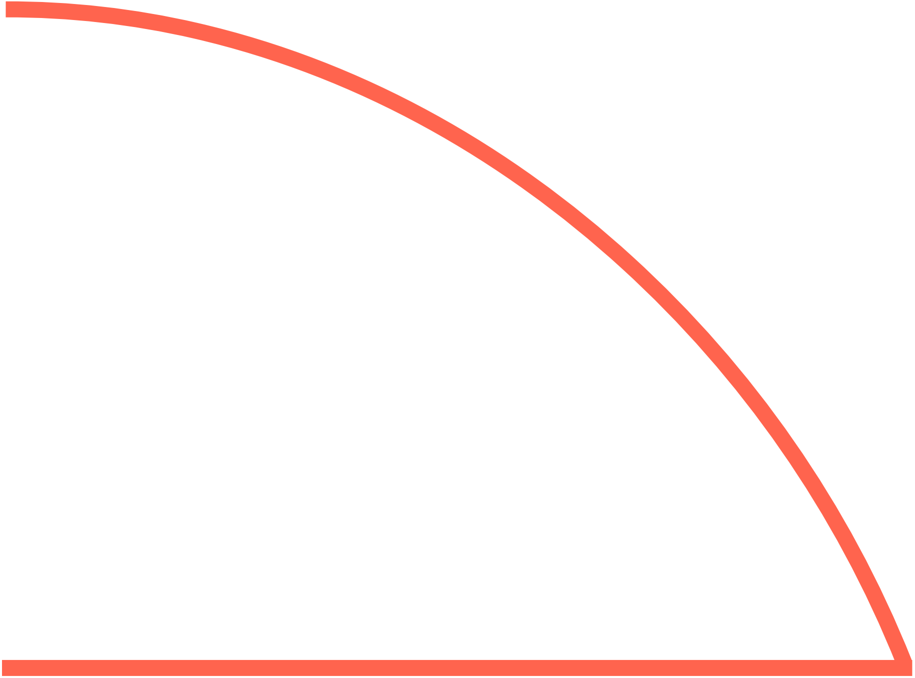
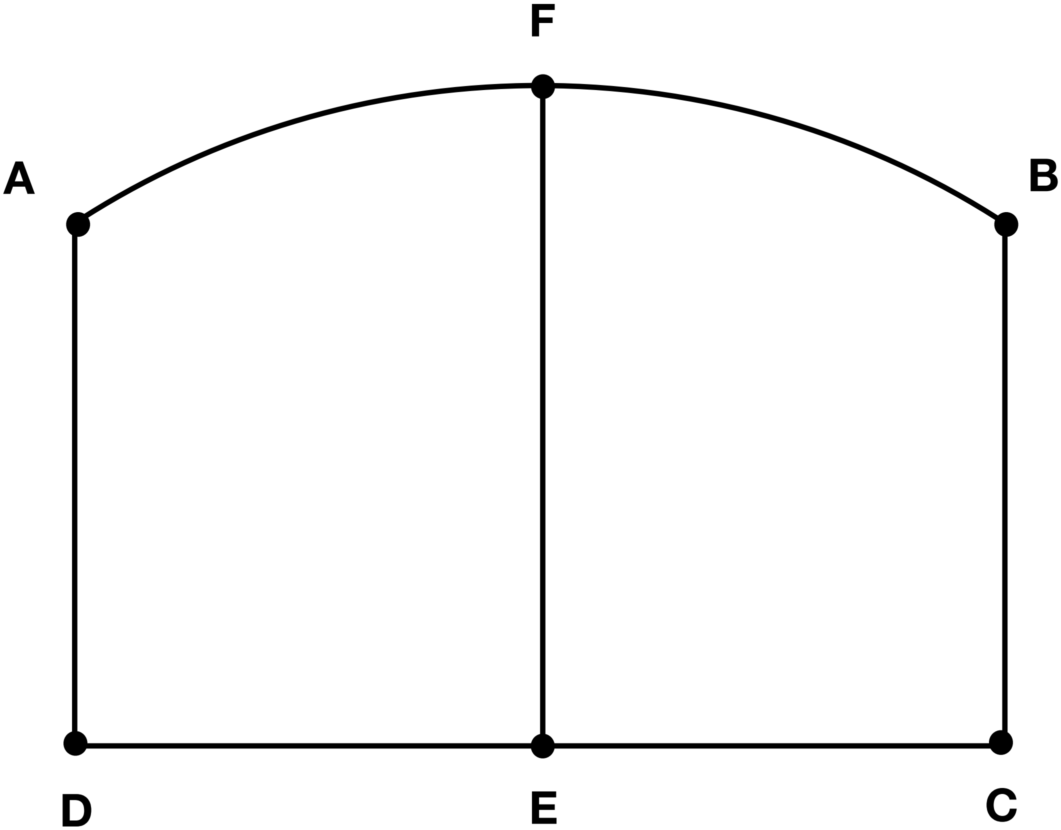
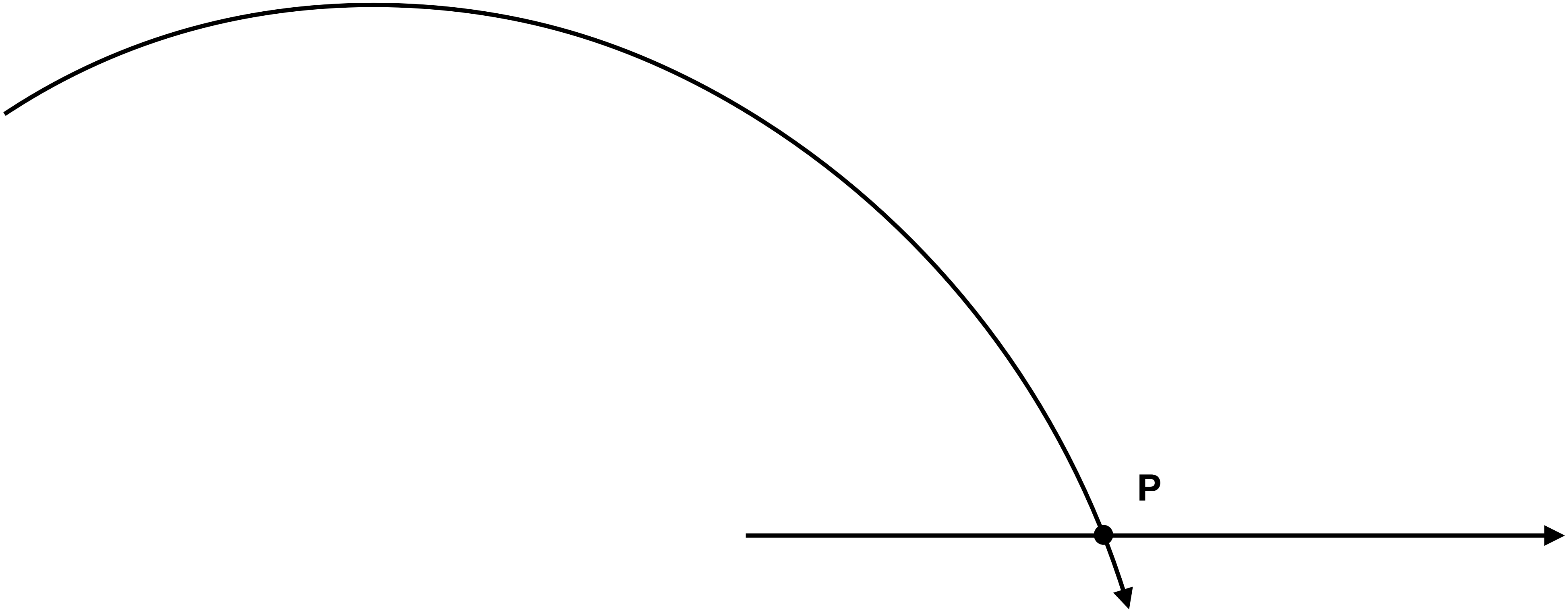


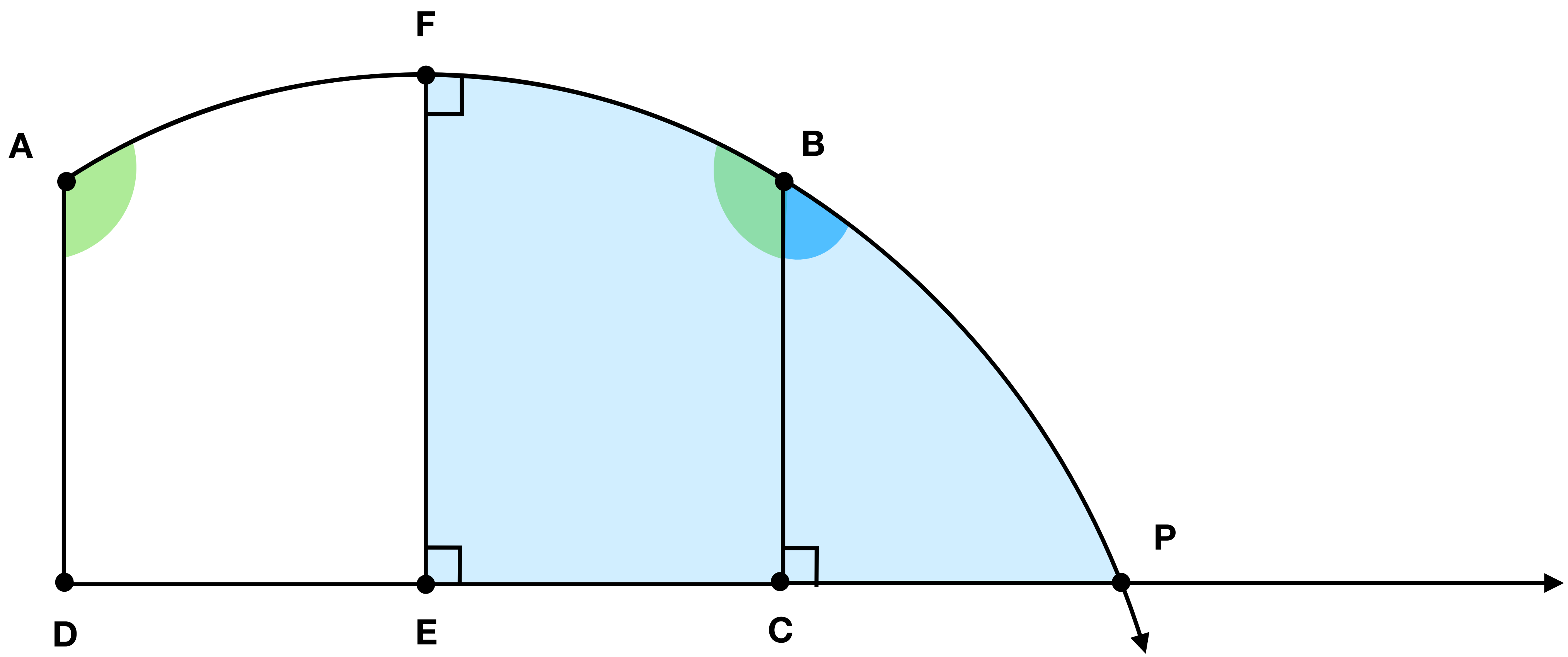
Proof. Let $\square ABCD$ be a Saccheri quadrilateral with altitude $\overline{EF}$ with $F \in \overleftrightarrow{AB}$. By the elliptic parallel postulate, the lines $\overleftrightarrow{AB}$ and $\overleftrightarrow{DC}$ must intersect at some point, say P. Relative to the ideal line $\overleftrightarrow{AD}$, we may say that $F - B - P$ and $E - C - P$.

Since $\triangle EFP$ is a double-right triangle, Theorem 6.8.4 shows that $\overline{EP}$ and $\overline{FP}$ are polar lengths. Also, $\triangle BPC$ is a right, with $m\angle B = 90°$. By Theorem 6.8.4, $\angle BCP$ is acute since $\overline{BP} < \overline{FP}$ (relative to $\overleftrightarrow{AD}$). Then its supplement, $\angle BCE$ is obtuse. $\square$

C


F
A
B
D
E
C


P



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