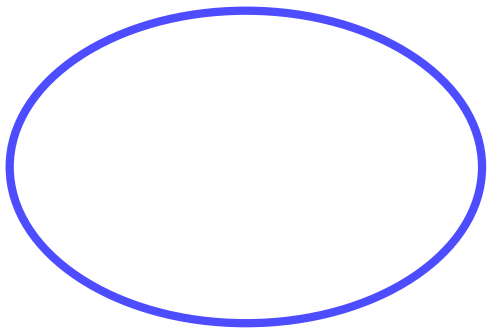
타원의 두 접선이 수직이 될 때 교점의 자취
(Trace of intersection when two tangents of an ellipse are perpendicular)

Trace of intersection when two tangents of an ellipse are perpendicular

Start End

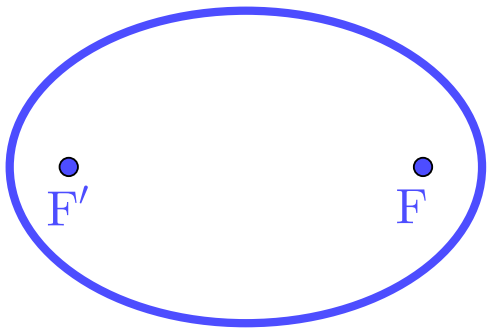
Trace of intersection when two tangents of an ellipse are perpendicular

Start End



Trace of intersection when two tangents of an ellipse are perpendicular

Start End



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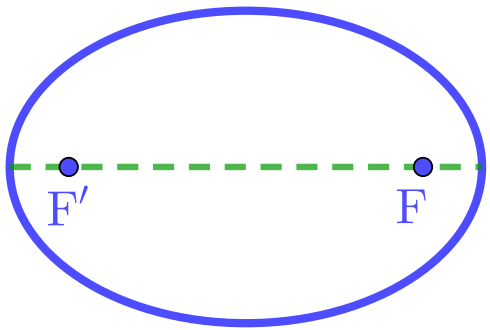

Trace of intersection when two tangents of an ellipse are perpendicular

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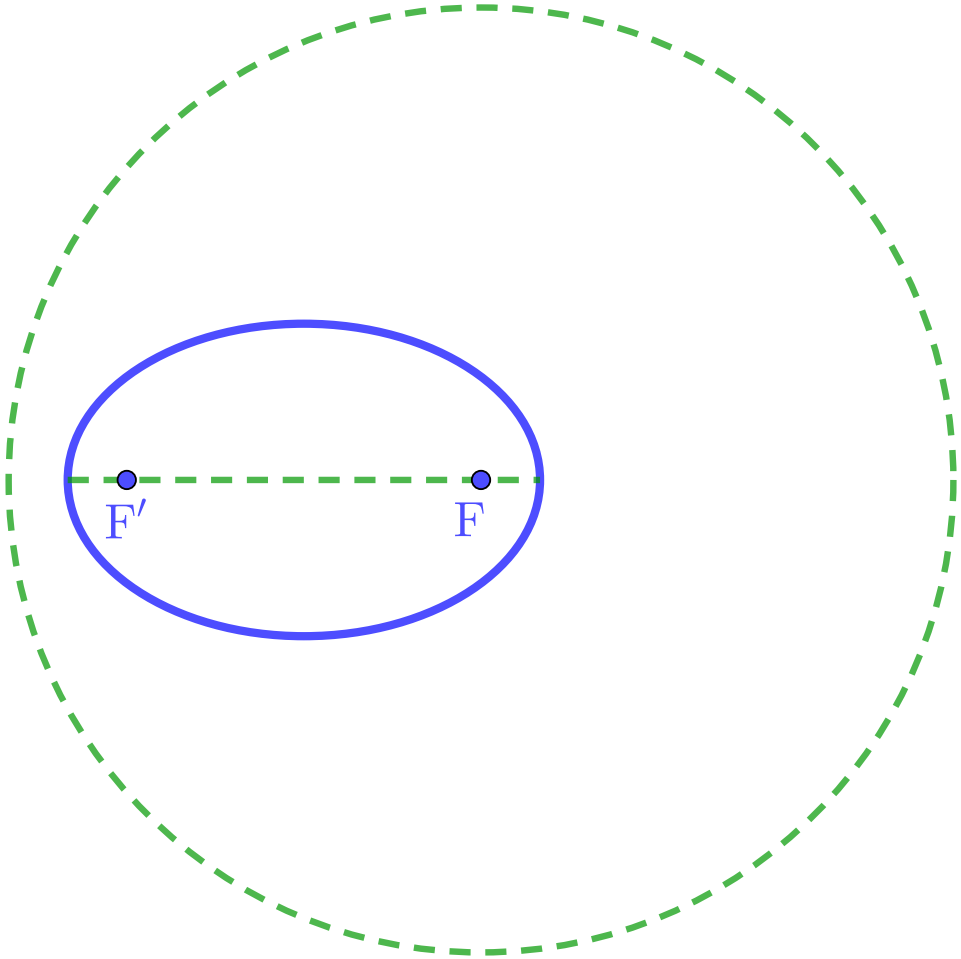

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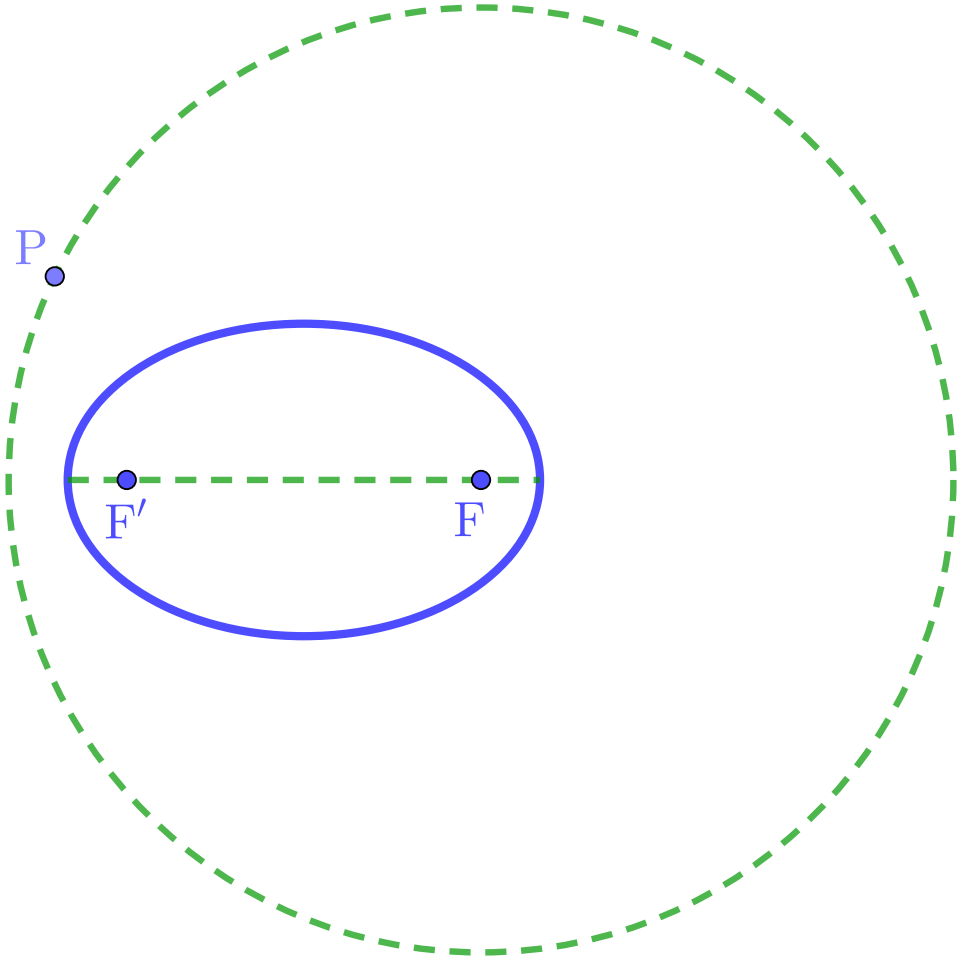

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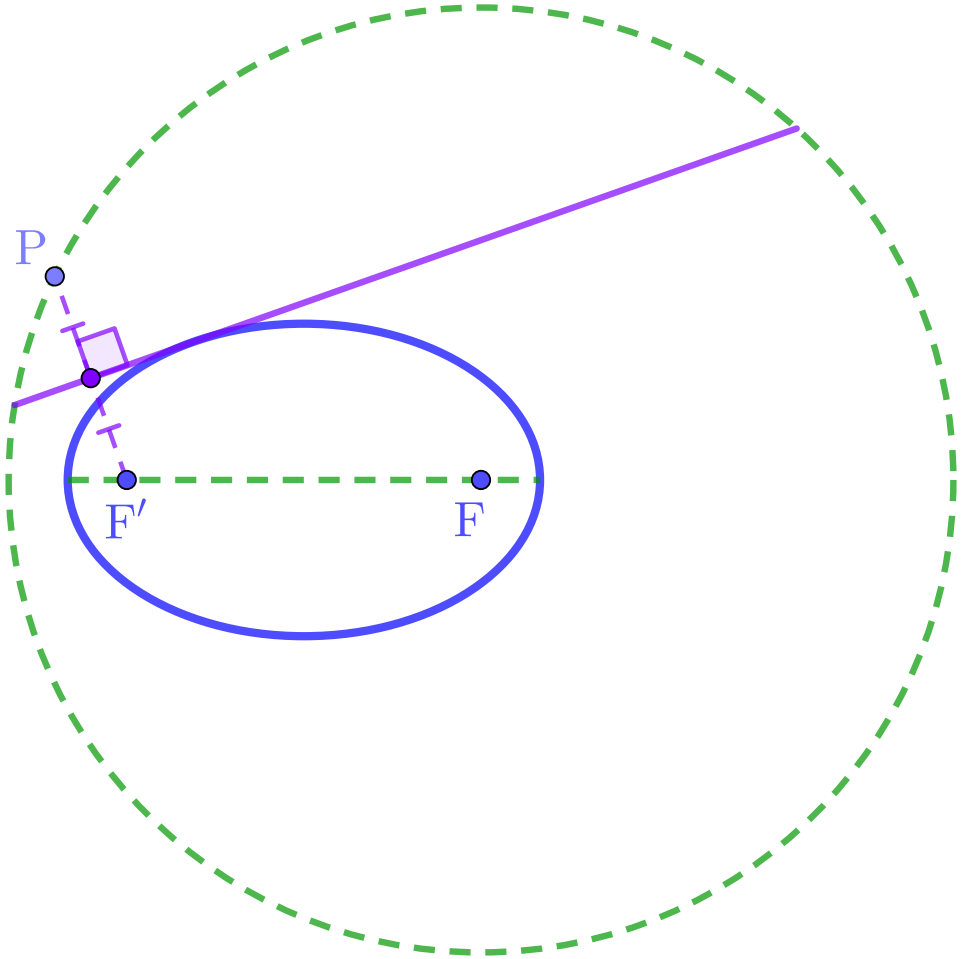

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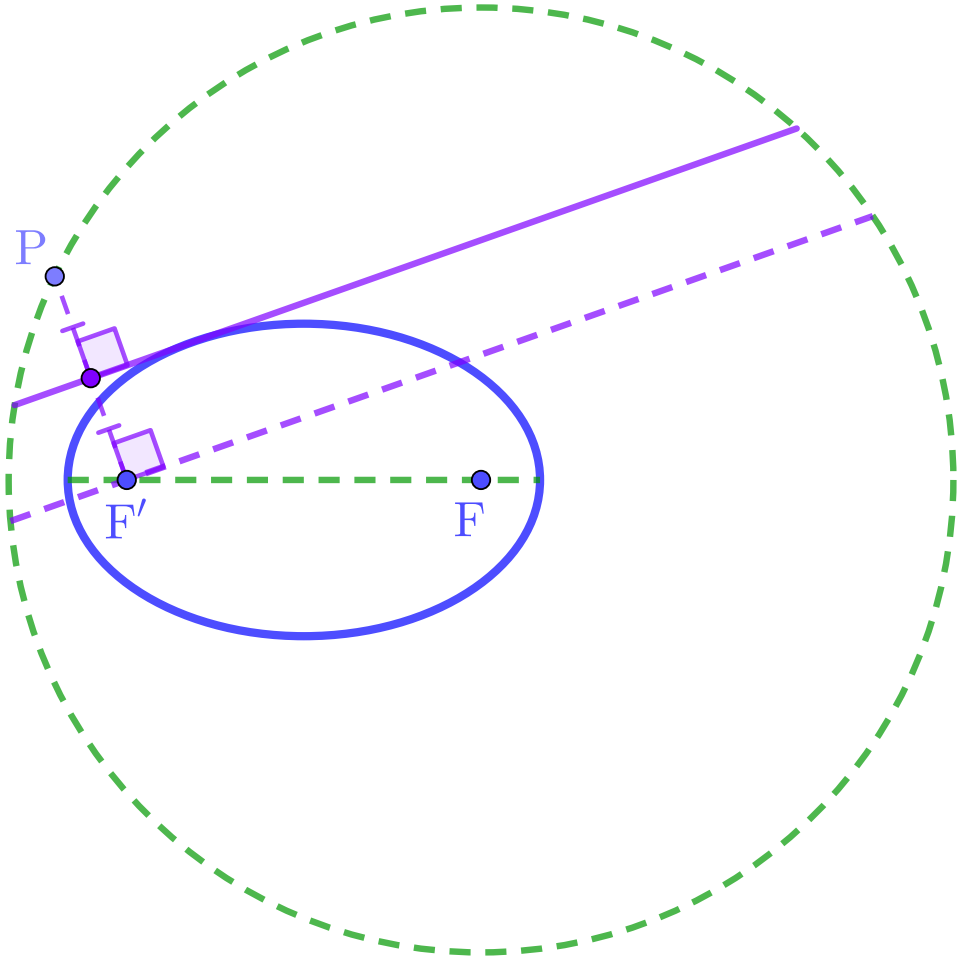

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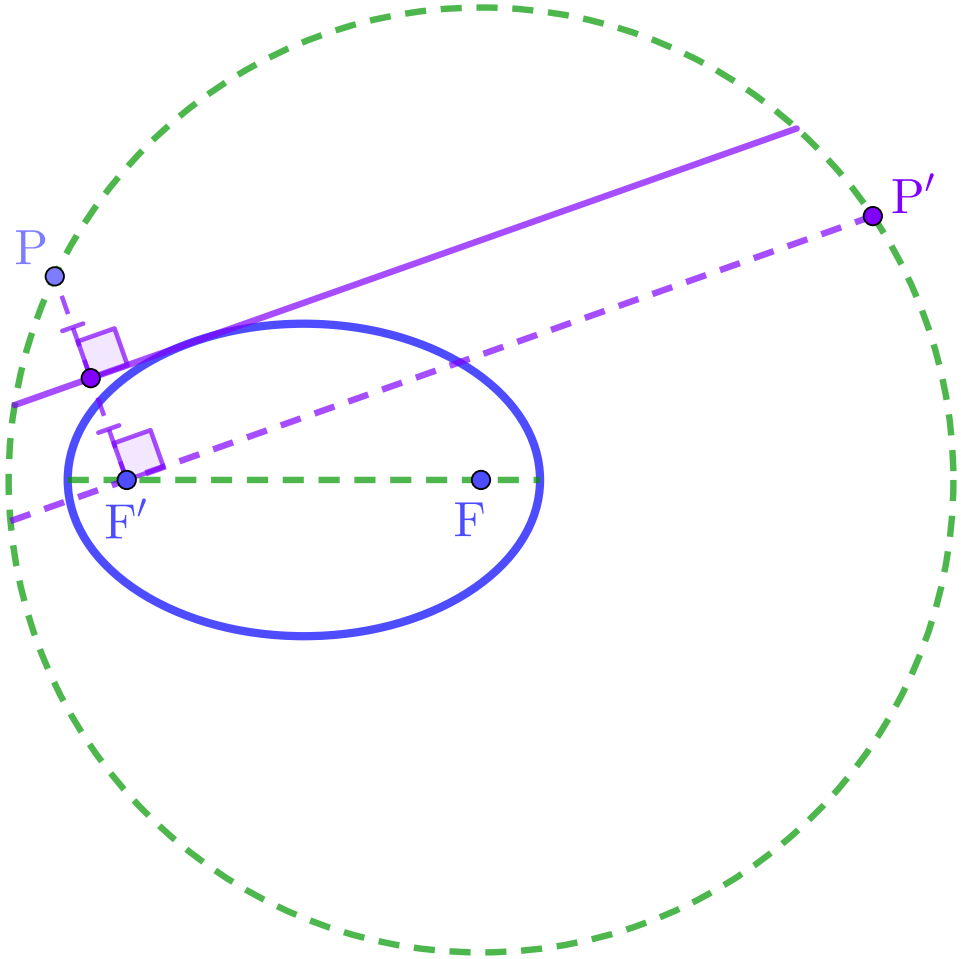

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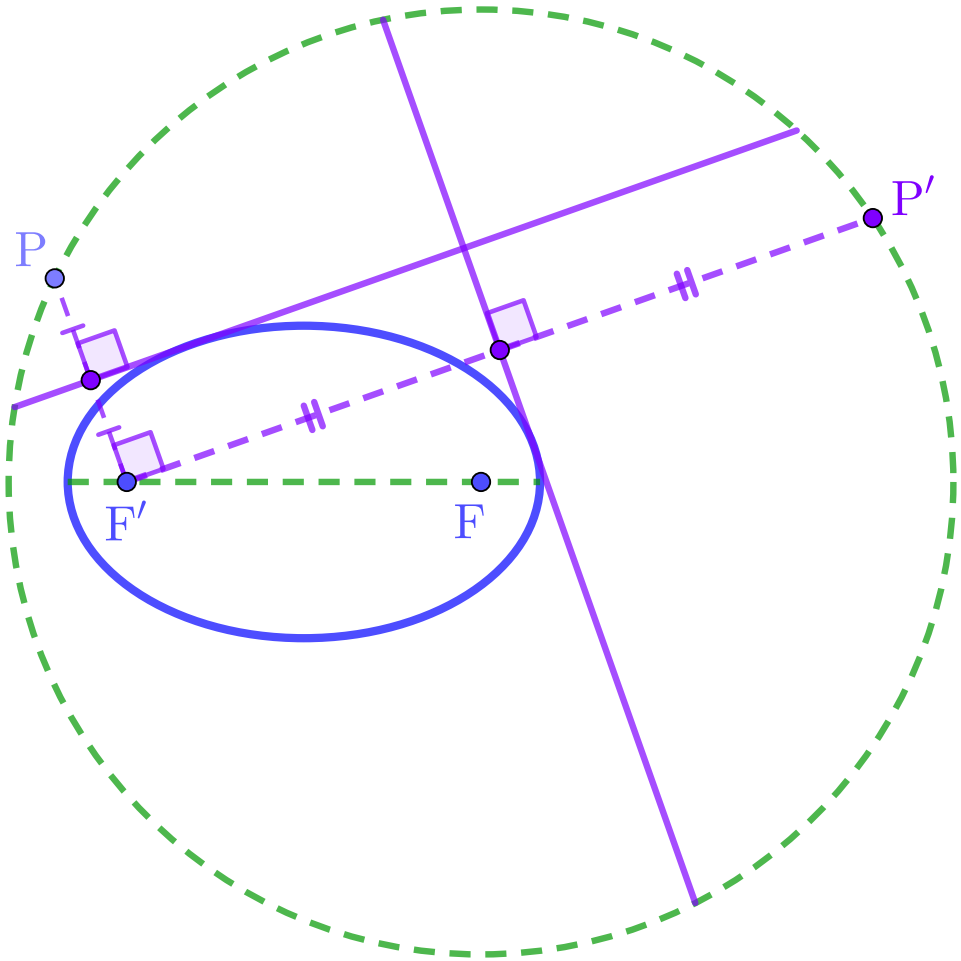

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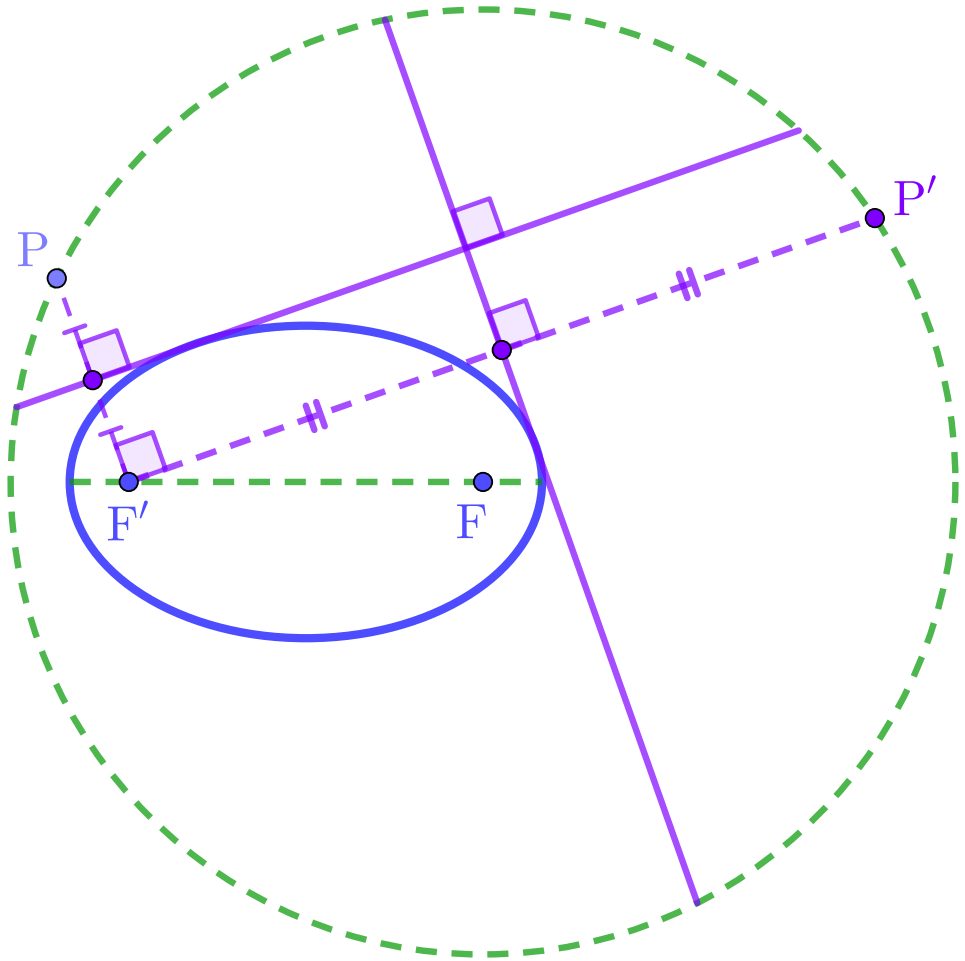

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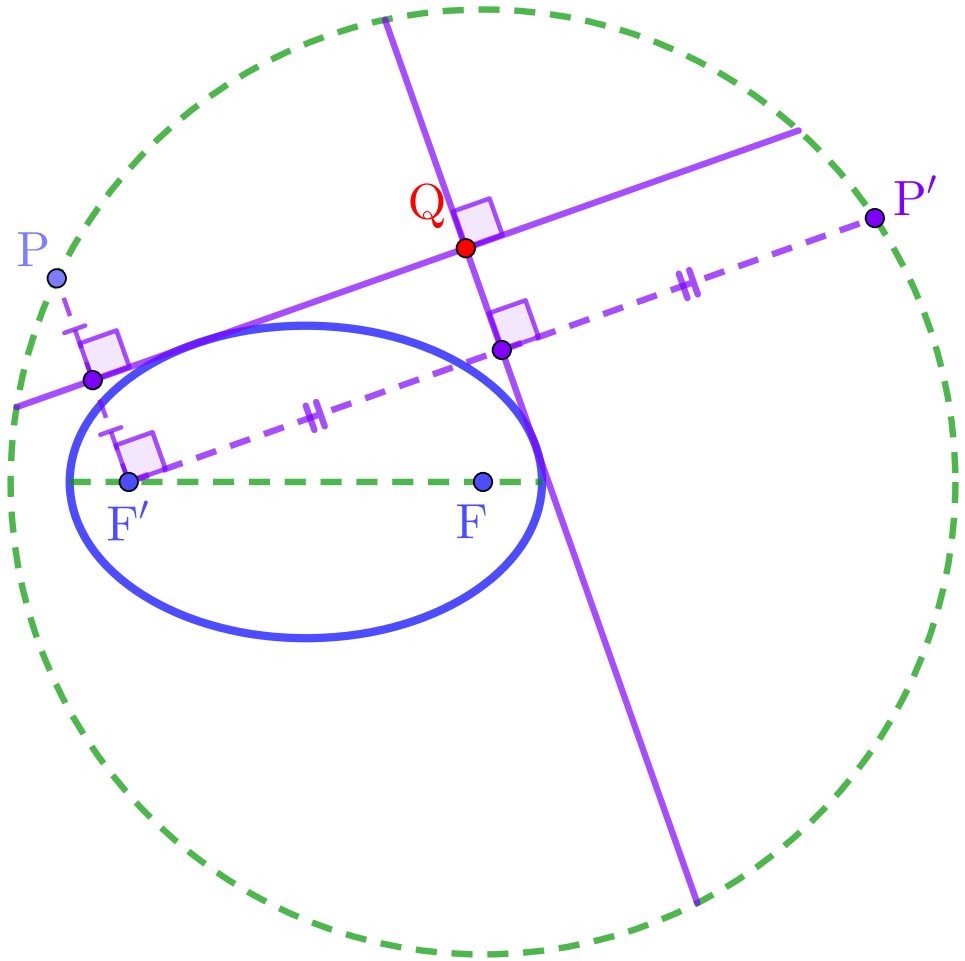

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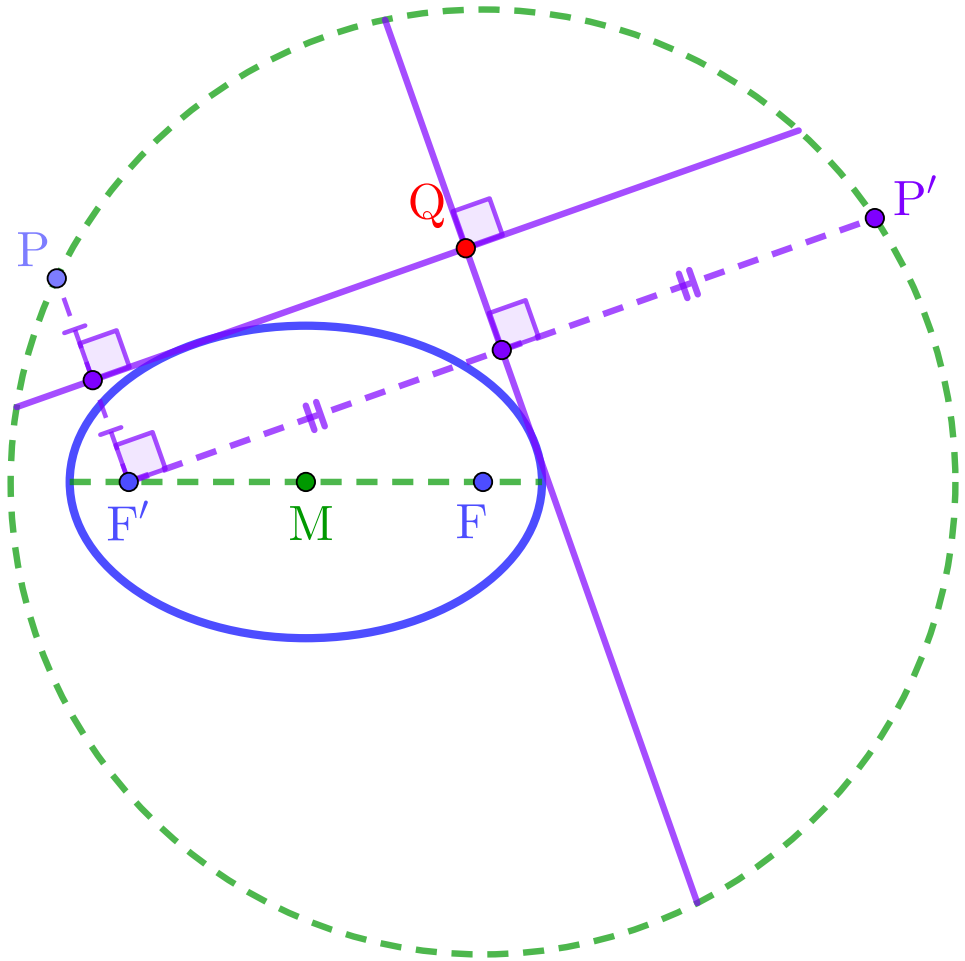

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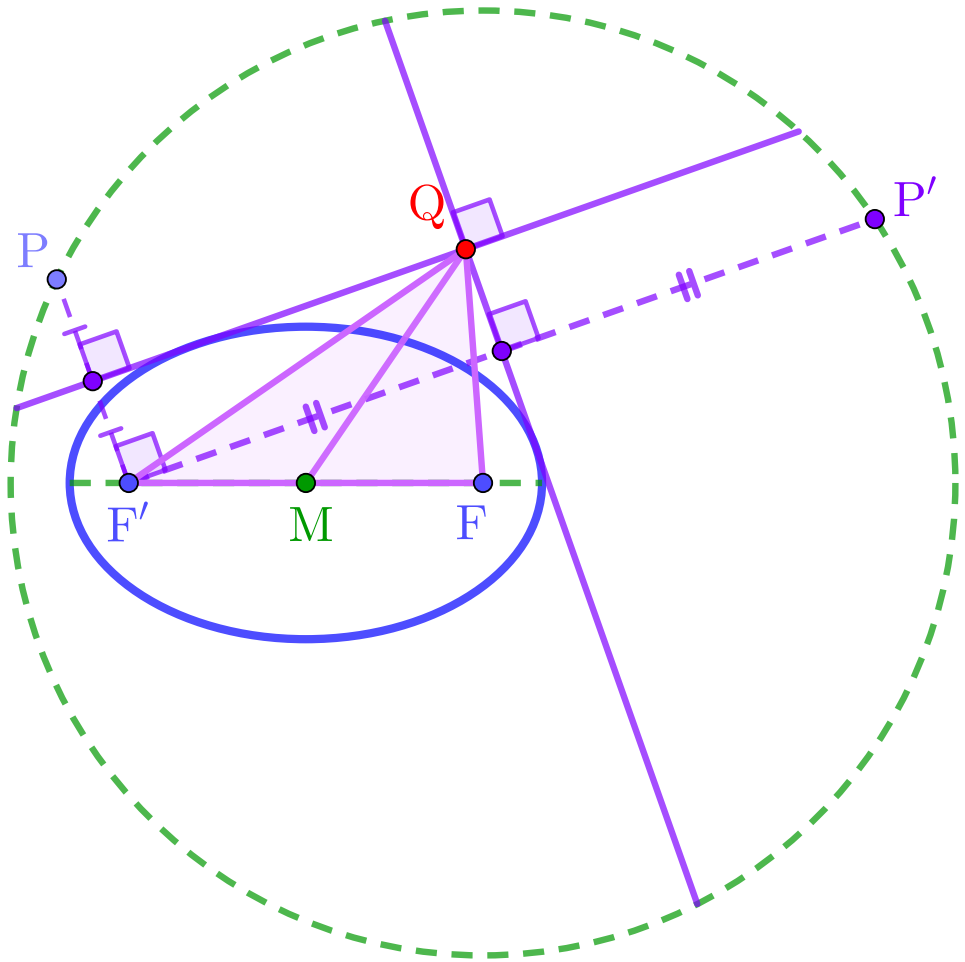

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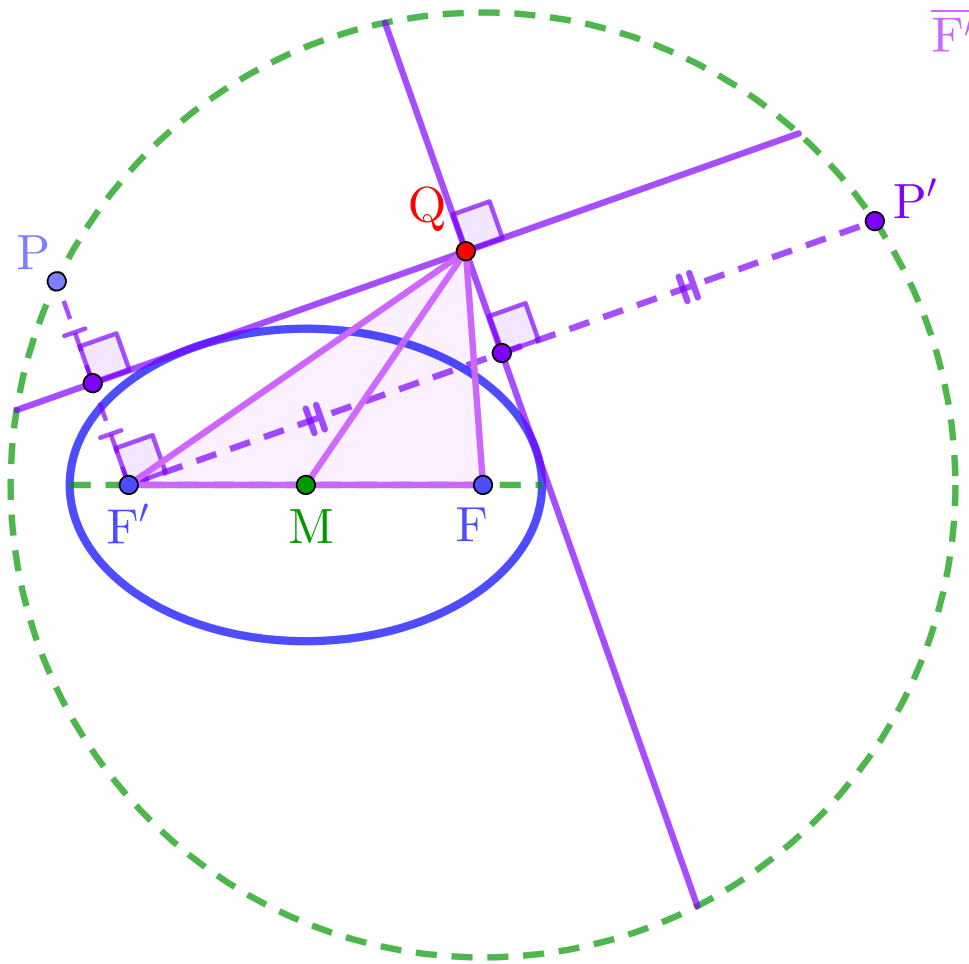

$$\overline{F'Q}^2 + \overline{FQ}^2 = 2\left(\overline{MQ}^2 + \overline{MF}^2\right)$$

Trace of intersection when two tangents of an ellipse are perpendicular

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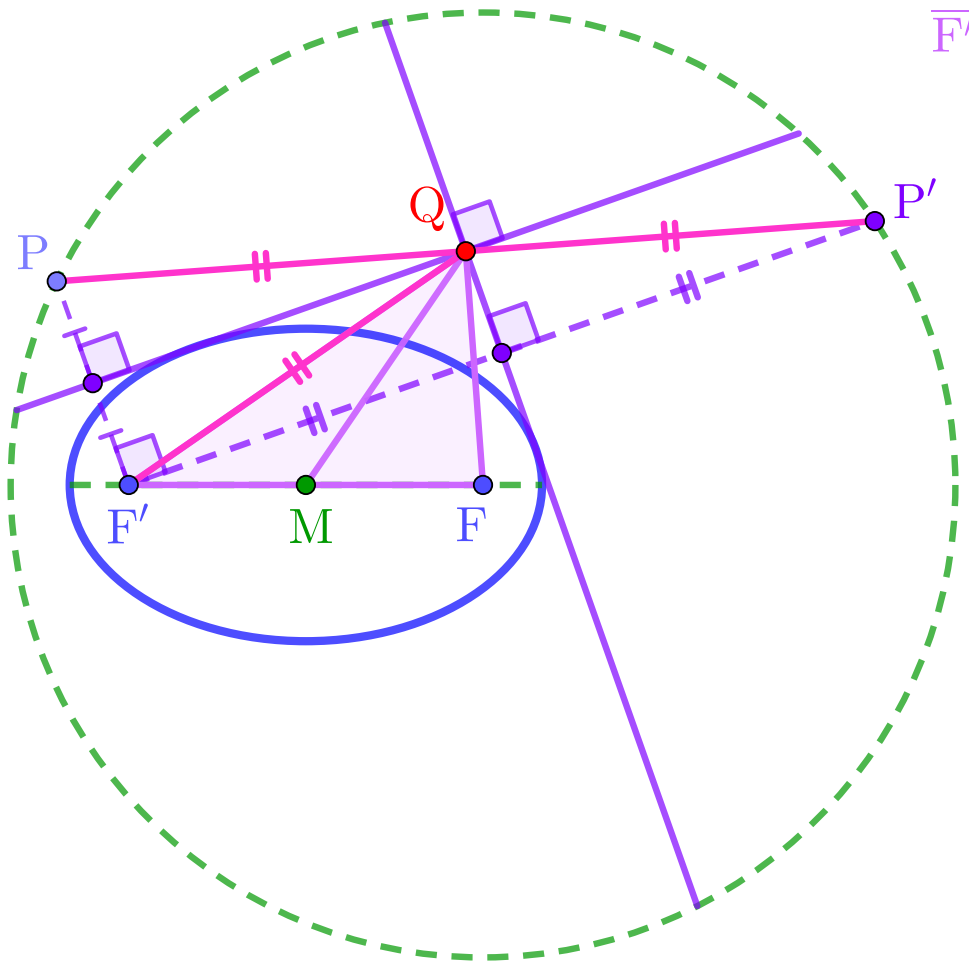

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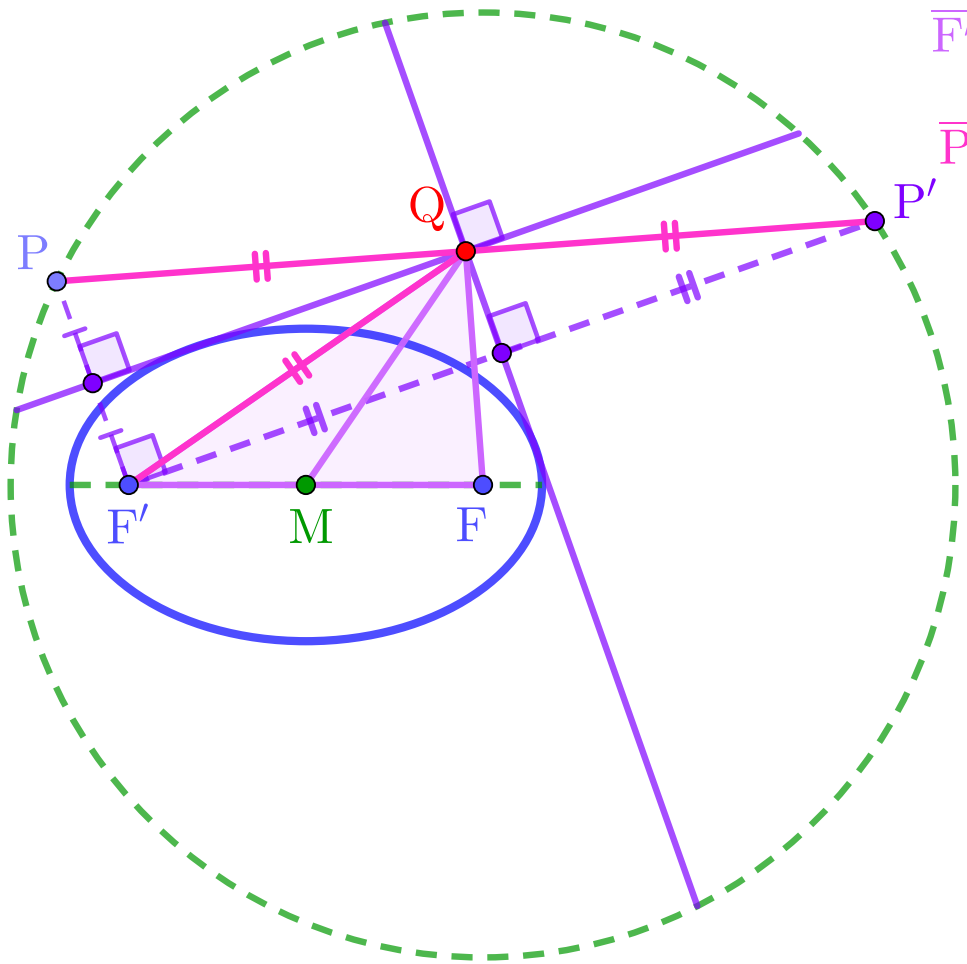

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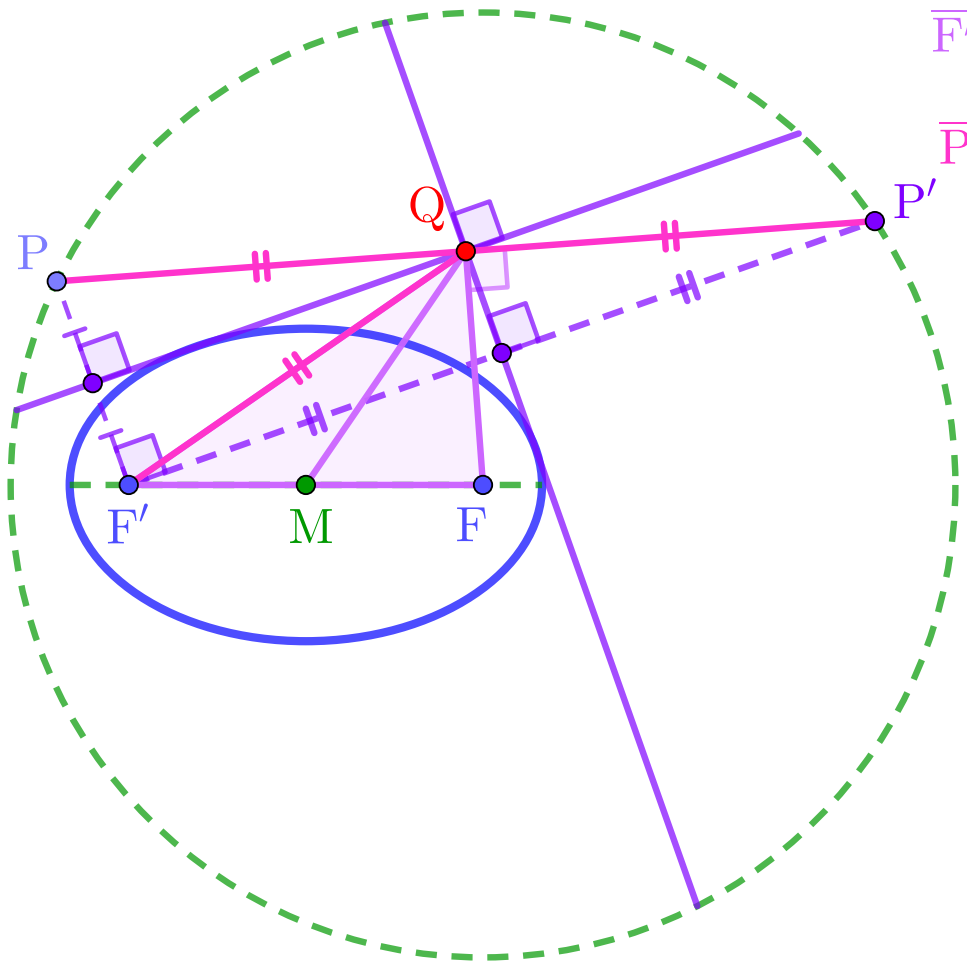

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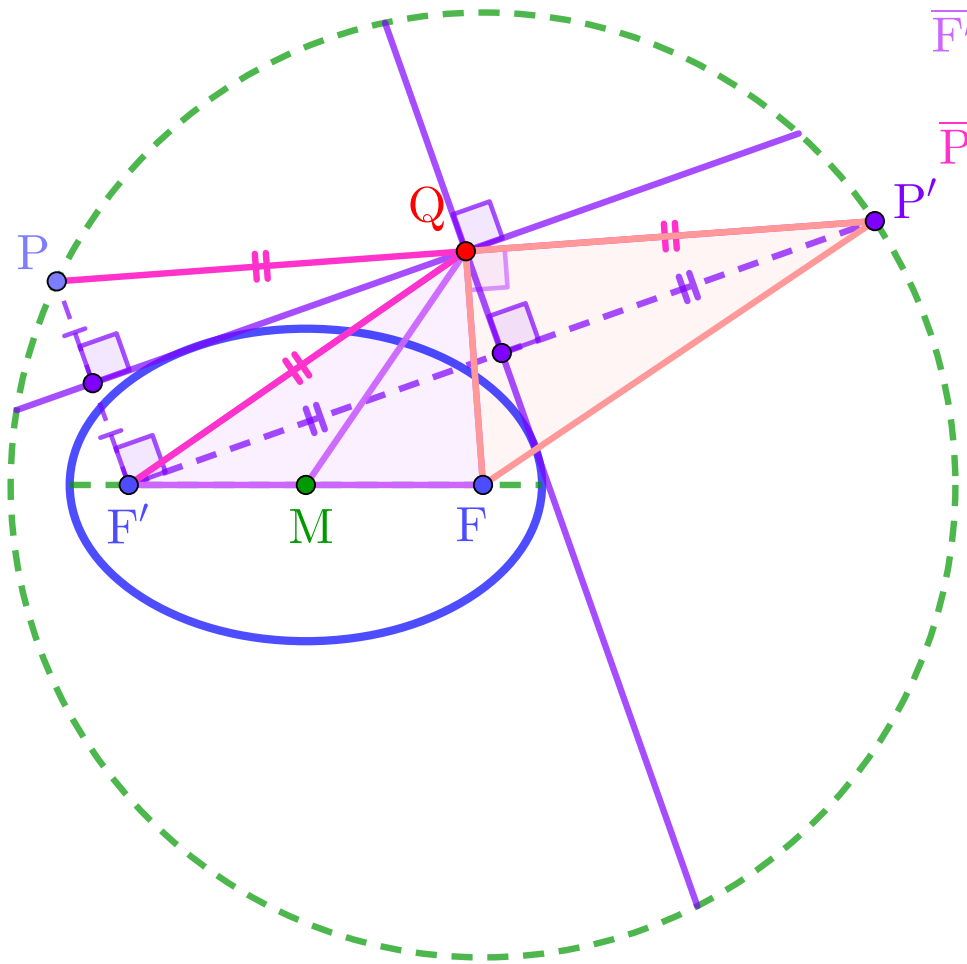

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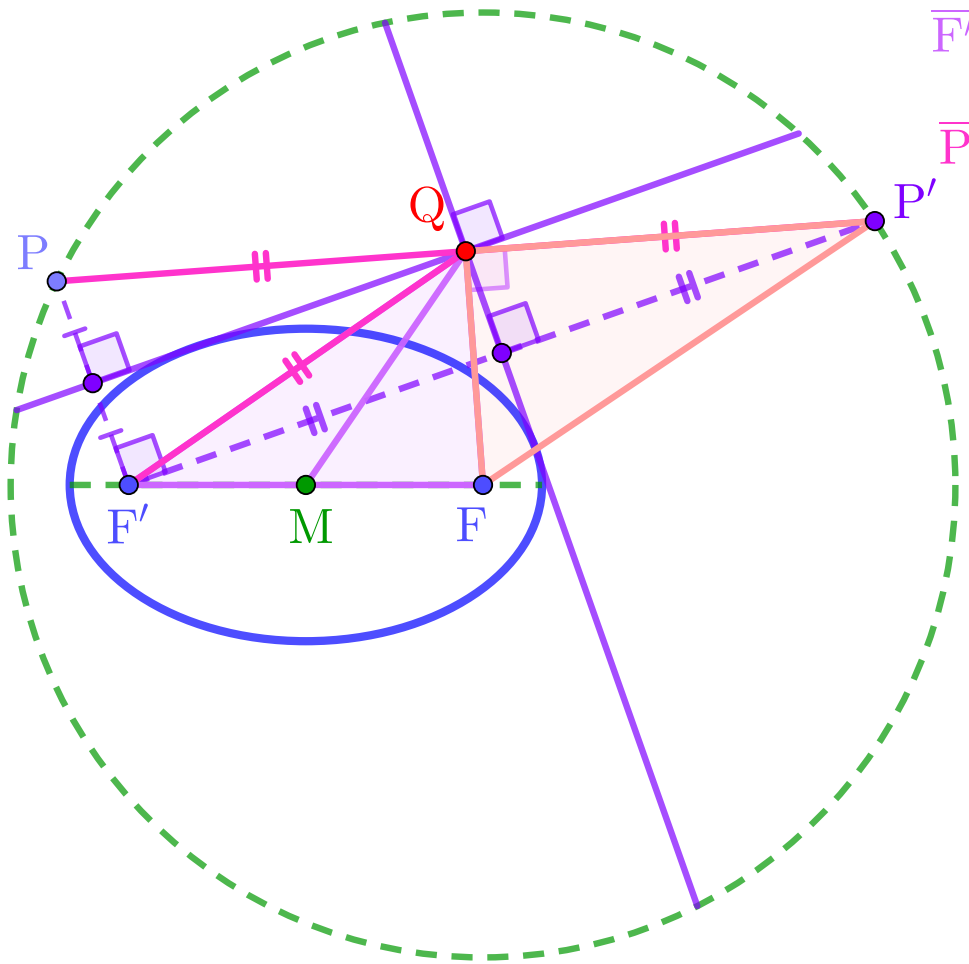

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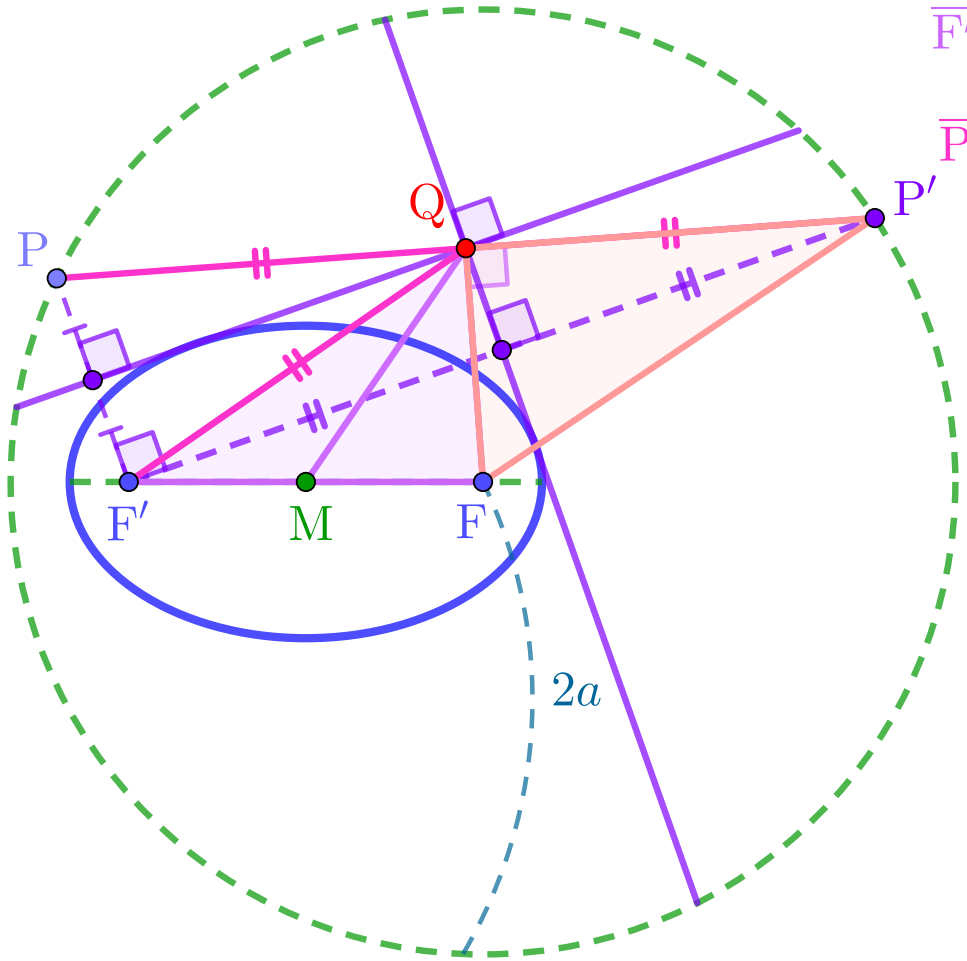

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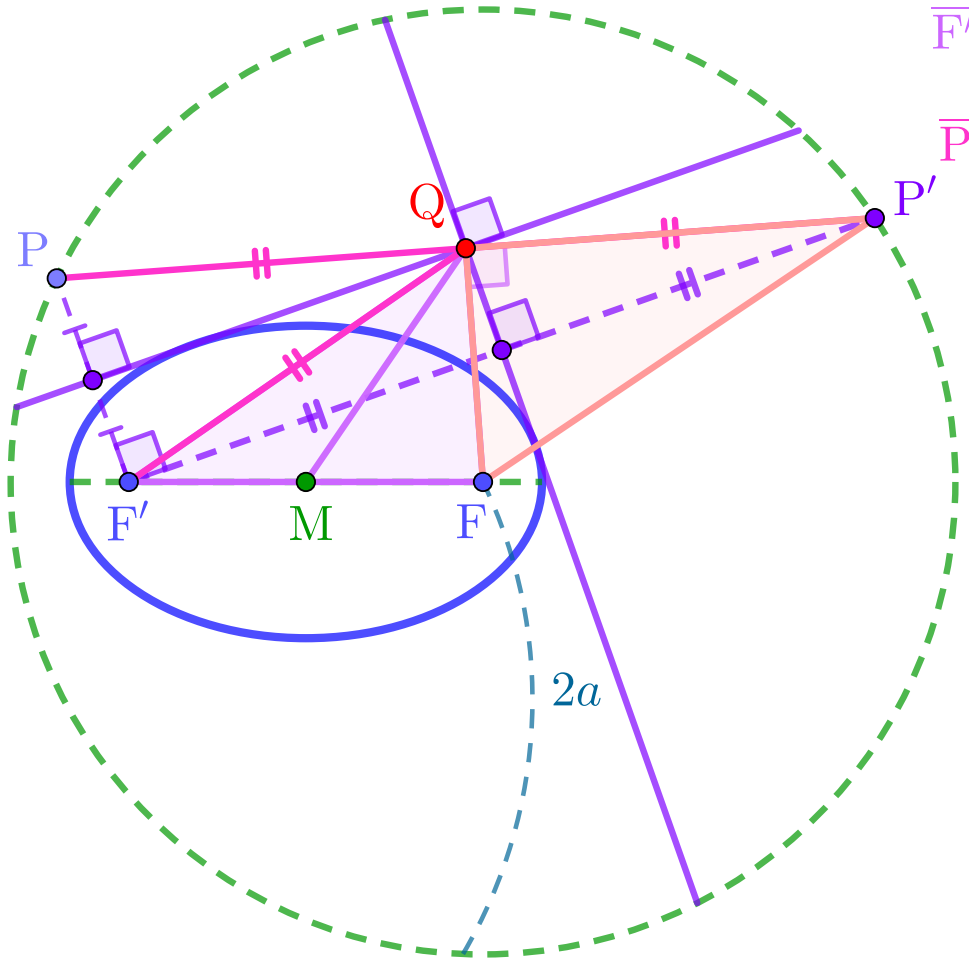

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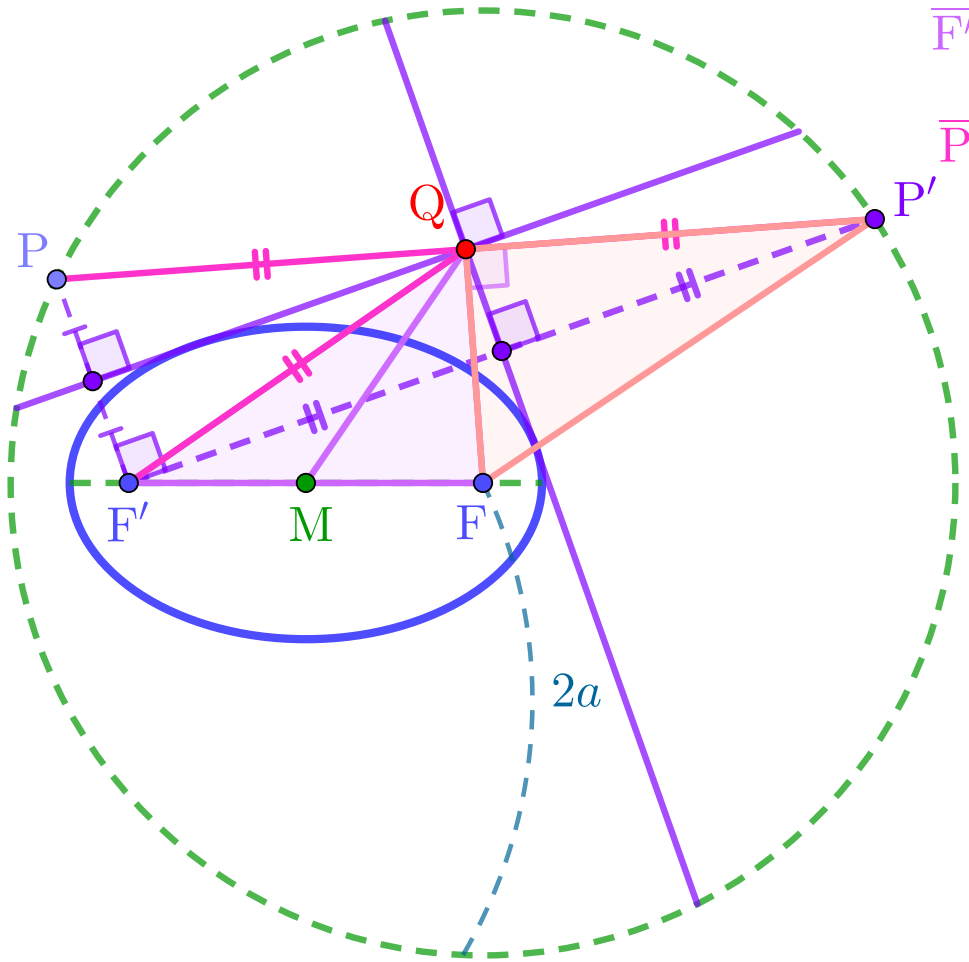

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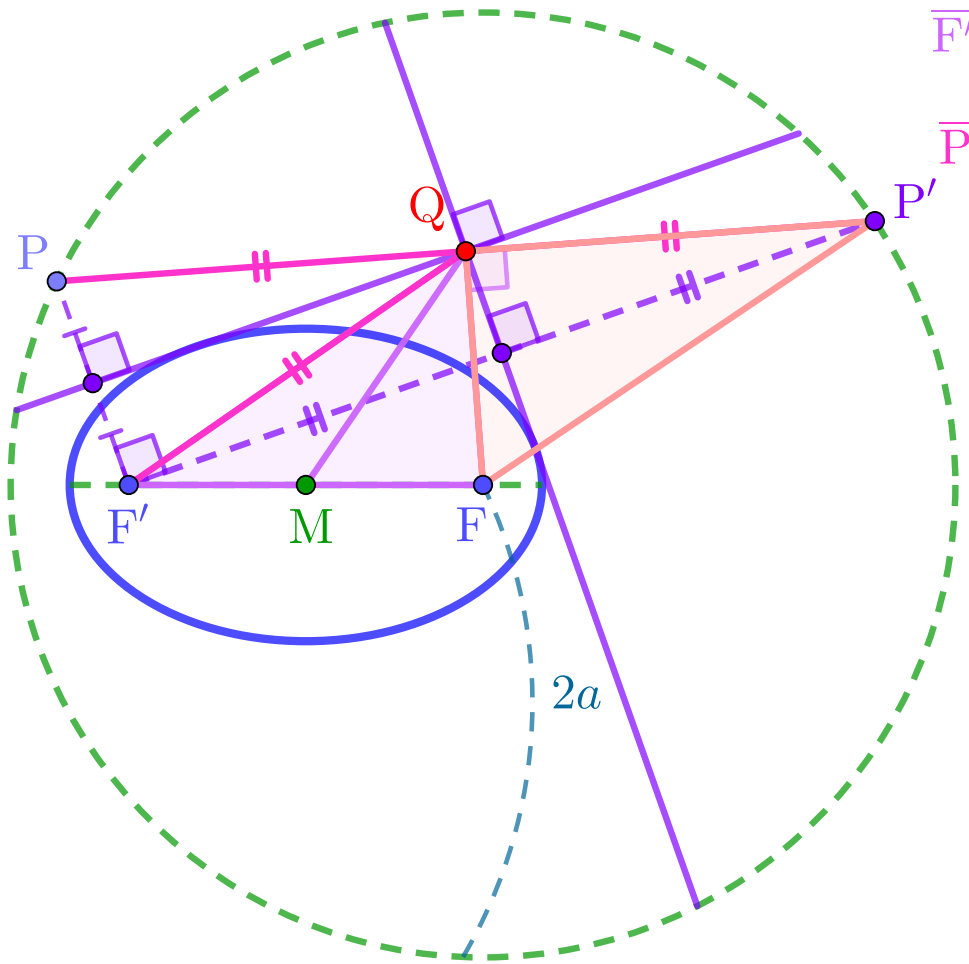

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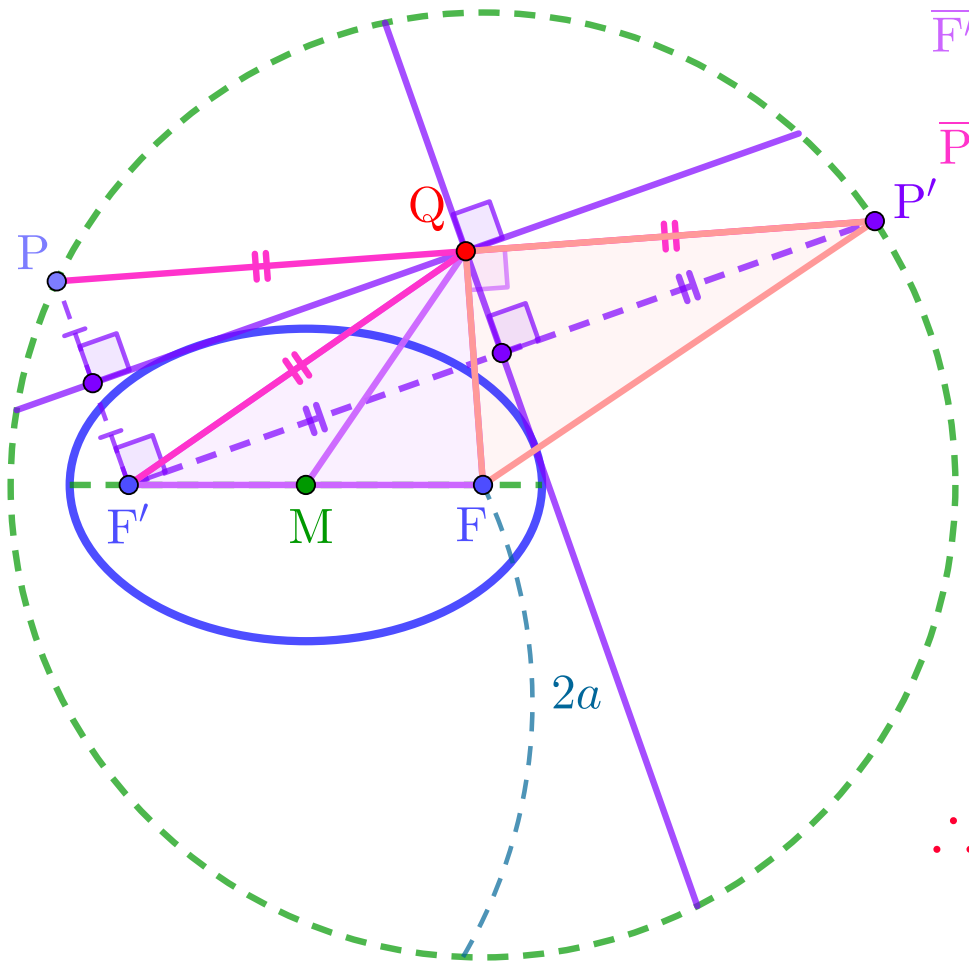

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$$2a^2 = \overline{MQ}^2 + \overline{MF}^2$$

$$\therefore \quad \overline{MQ}^2 = 2a^2 - \overline{MF}^2$$

Trace of intersection when two tangents of an ellipse are perpendicular

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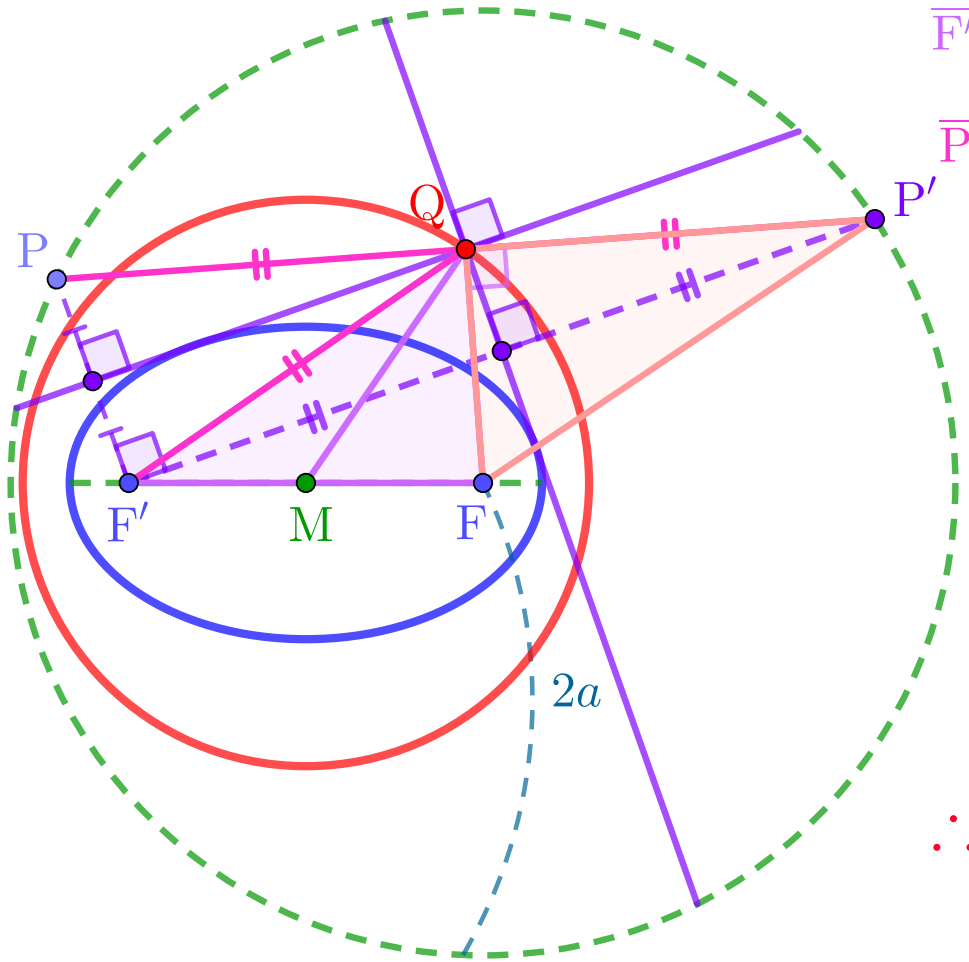

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$$\therefore \quad \overline{MQ}^2 = 2a^2 - \overline{MF}^2$$

Github:
https://min7014.github.io/math20220604001.html

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