

극좌표에서의 곡선의 길이 (The Arc Length in The Polar Coordinates)

The Arc Length in The Polar Coordinates

▶ Start

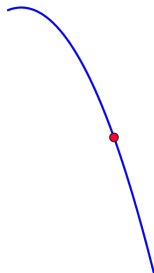
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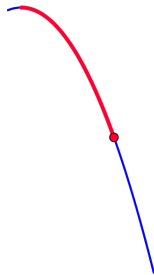
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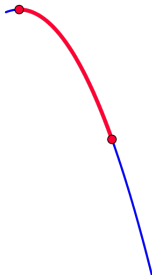
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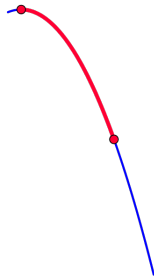
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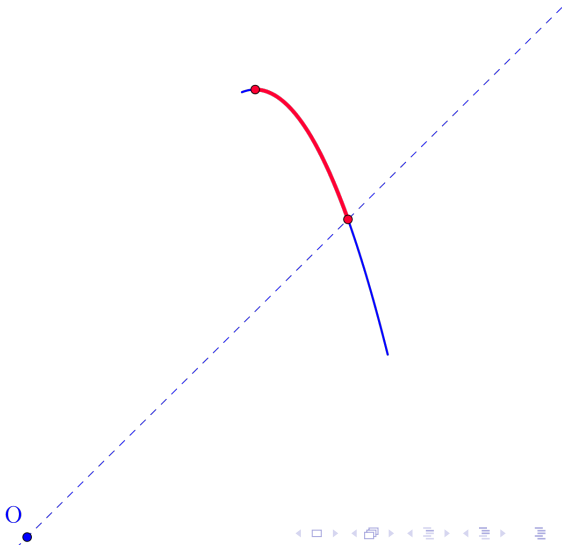
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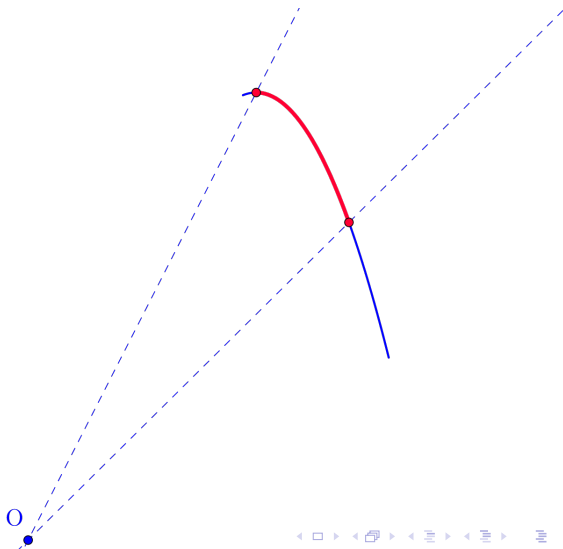
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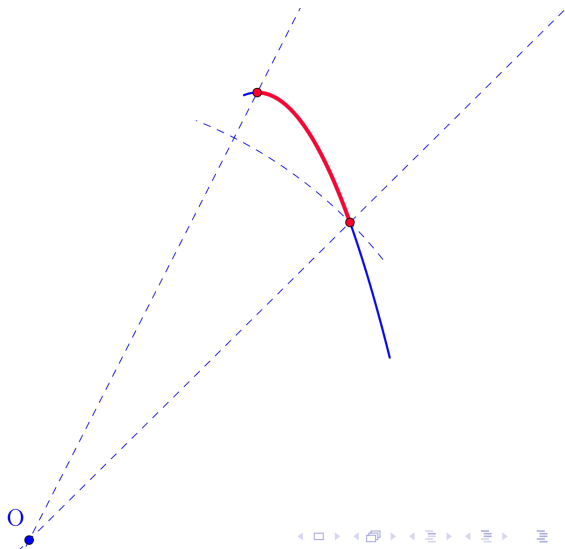
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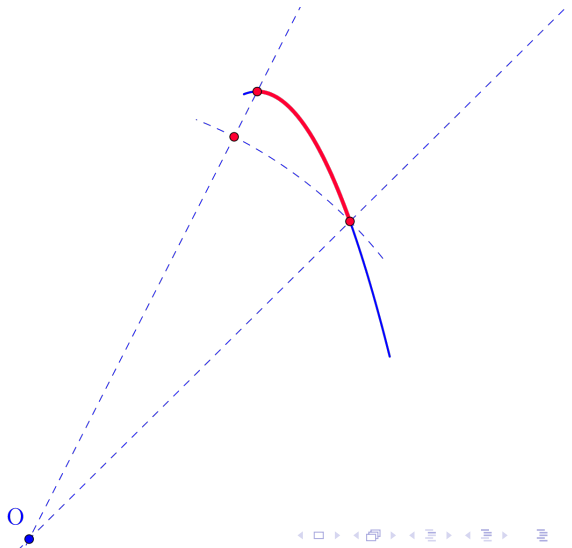
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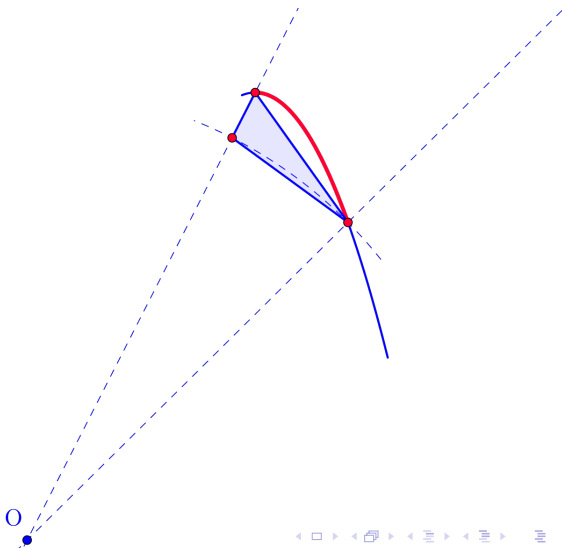
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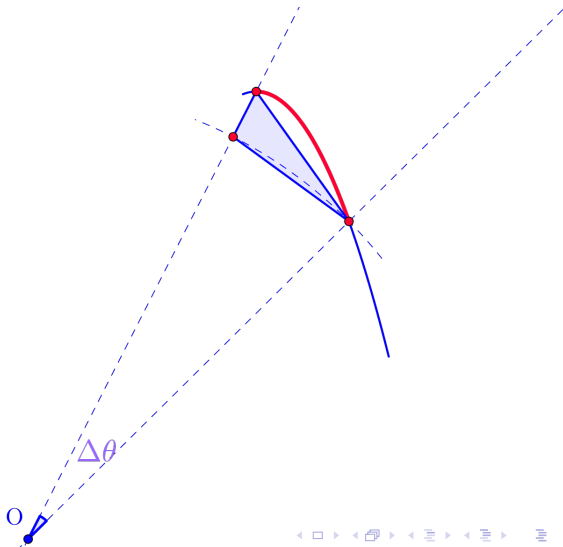
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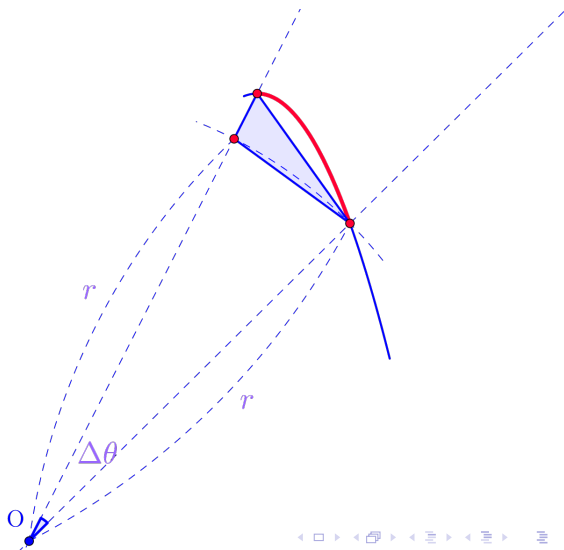
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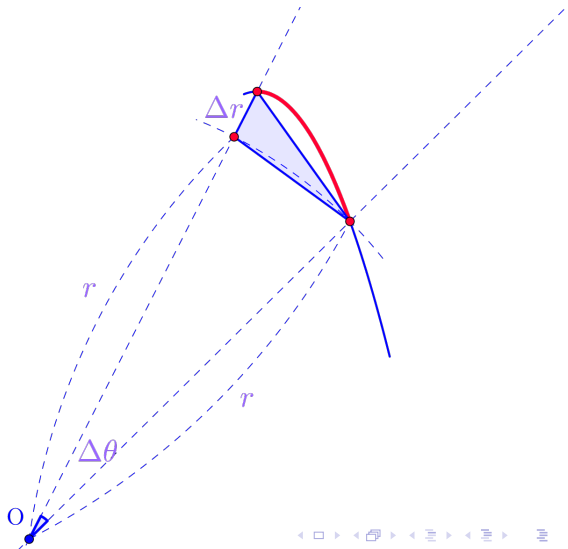
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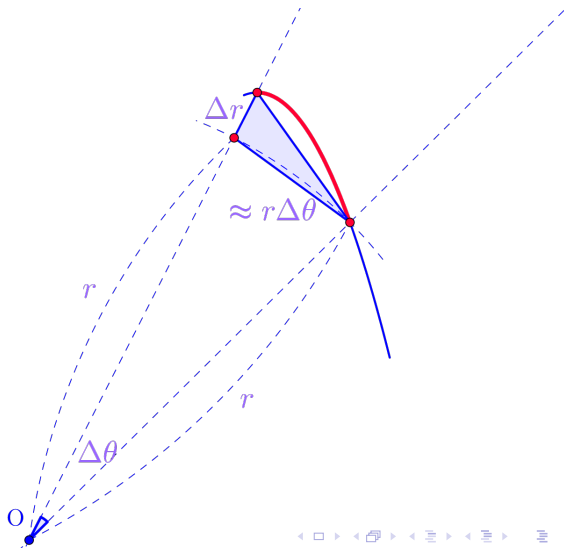
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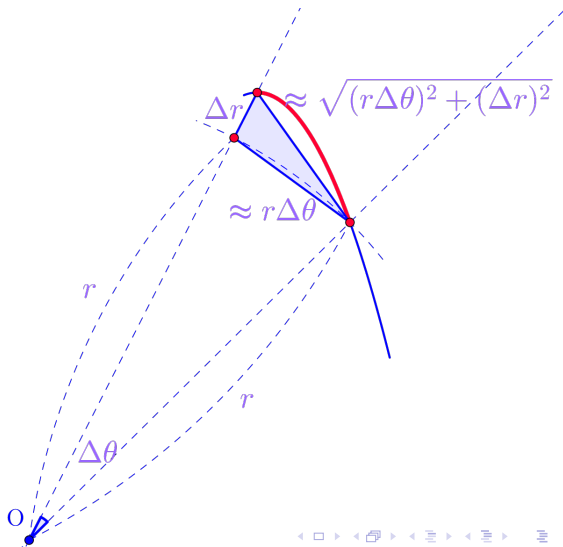
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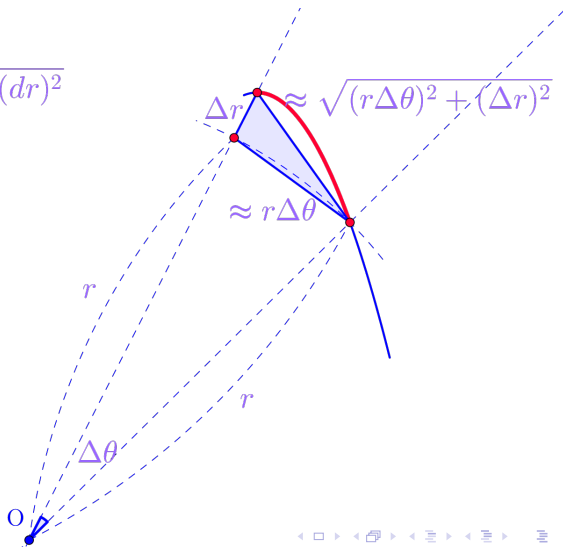
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$$\int \sqrt{(rd\theta)^2 + (dr)^2}$$



The Arc Length in The Polar Coordinates

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$$\int \sqrt{(rd\theta)^2 + (dr)^2}$$
$$= \int \sqrt{r^2 + \left(\frac{dr}{d\theta}\right)^2} d\theta$$

