

# Geometry in Figures

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This page is a comprehensive collection of geometric theorems and diagrams, organized into several sections:

- Pythagorean theorem:**  $a^2 + b^2 = c^2$
- The inscribed angle theorem:**  $\alpha + \beta = 180^\circ$
- Miquel's theorem:**  $a + \beta + \gamma + \delta + \epsilon = 180^\circ$
- Simon line:**  $a \cdot c = b \cdot d$
- General Simon line:**  $a \cdot c = b \cdot d$
- Miquel point:**  $a \cdot c = b \cdot d$
- Clifford's circle theorem:**  $a \cdot c = b \cdot d$
- Aubert line:**  $a + \beta = 180^\circ$
- Gauss line:**  $a + \beta = 180^\circ$
- Gauss-Bodenmiller theorem:**  $a + \beta = 180^\circ$
- Brahmagupta's theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Ptolemy's theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Eight-Point Circle Theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Newton's theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Radical axis theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Desargues' theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Butterfly theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Pascal's theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Brianchon's theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Pappus' theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Three conics theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Dual three conics theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Casey's theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Hart's theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Eyeball theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Monge's theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Steiner's theorem:**  $r_1 \cdot r_2 \cdot r_3 = r_4 \cdot r_5 \cdot r_6$
- Blanchet's theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Carnot's theorem:**  $a^2 + b^2 + c^2 = d^2 + e^2 + f^2$
- Orthopole theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Neville's theorem:**  $a \cdot c + b \cdot d = e \cdot f$
- Optical property of an ellipse:**  $a \cdot c + b \cdot d = e \cdot f$
- Remarkable properties of the parabola:**  $a \cdot c + b \cdot d = e \cdot f$
- Optical property:**  $a \cdot c + b \cdot d = e \cdot f$
- Poncelet's theorem:**  $a + \beta = 180^\circ$
- Ivory's theorem:**  $a + \beta = 180^\circ$
- Joachimsthal's Circle:**  $a + \beta = 180^\circ$
- Remarkable properties of the rectangular hyperbola:**  $a + \beta = 180^\circ$
- Van Aubel's theorem:**  $a + c + e = b + d + f$
- Fontene's theorem:**  $a + c + e = b + d + f$
- Emelyanov's theorem:**  $a + c + e = b + d + f$
- van Lamoen circle:**  $a + c + e = b + d + f$
- Tucker's Circle:**  $a + c + e = b + d + f$
- Morley's theorem:**  $a + c + e = b + d + f$
- Napoleon point:**  $a + c + e = b + d + f$
- Thebault's theorem:**  $a + c + e = b + d + f$

