

	Rule	Visual	Example
Interior Angles	Add up to $180^\circ$	<p> <math>m\angle A + m\angle B + m\angle C = 180^\circ</math>  <math>25 + 100 + 55 = 180</math> </p>	<p> <math>90 + 4x - 5 + 3x + 11 = 180</math>  <math>7x + 96 = 180</math>  <math>-96 \quad -96</math>  <math>\frac{7x}{7} = \frac{84}{7}</math> <math>x = 12</math> </p>
Exterior Angles	Add 2 non-adjacent int $\angle$ 's	<p> <math>m\angle 1 = m\angle A + m\angle B</math>  <math>m\angle 1 = 60^\circ + 70^\circ</math>  <math>m\angle 1 = 130^\circ</math> </p>	<p> <math>9x - 2 + 40 = 20x + 5</math>  <math>9x + 38 = 20x + 5</math>  <math>-9x \quad -9x</math>  <math>33 = 11x + 5</math>  <math>-5 \quad -5</math>  <math>\frac{33}{11} = \frac{11x}{11}</math> <math>x = 3</math> </p>
Isosceles $\Delta$	$\cong$ Base $\angle$ 's Sides opposite base $\angle$ 's are $\cong$	<p> <math>\angle P = 48^\circ</math>  <math>\angle R = 84^\circ</math>  <math>RQ \cong 5</math> </p>	<p> <math>4x + 10 + 40 + 40 = 180</math>  <math>4x + 90 = 180</math>  <math>-90 \quad -90</math>  <math>\frac{4x}{4} = \frac{90}{4}</math> <math>x = 22.5</math> </p>
Equilateral $\Delta$	All sides are $\cong$ All $\angle$ 's are $\cong$	<p> <math>\angle P = 60^\circ</math>  <math>\angle R = 60^\circ</math>  <math>RQ \cong 8</math> </p>	<p> <math>\frac{2x = 12}{2} = \frac{12}{2}</math>  <math>x = 6</math> </p>
Congruent Figures	Corresponding Angles are $\cong$ Corresponding Sides are $\cong$	<p> <math>\angle A \cong \angle P</math>  <math>\angle B \cong \angle Q</math>  <math>\angle C \cong \angle R</math>  <math>AB \cong PQ</math>  <math>BC \cong QR</math>  <math>CA \cong RP</math> </p>	<p> <math>\triangle ABC \cong \triangle DEF</math>  <math>\frac{3x = 9}{3} = \frac{9}{3}</math> <math>x = 3</math>  <math>5y - 3 = 22</math>  <math>+3 \quad +3</math>  <math>\frac{5y}{5} = \frac{25}{5}</math> <math>y = 5</math> </p>
Midsegment Theorem	Midsegments are $\parallel$ and $\frac{1}{2}$ as long as 3 <sup>rd</sup> side	<p> <math>NP \parallel RQ</math>  <math>MP = 4</math>  <math>SQ = 6</math>  <math>RQ = 10</math> </p>	<p> <math>EC = 3</math>  <math>AC = 4</math>  <math>AB = 8</math> </p>