

Precalculus

6-02 Law of Cosines

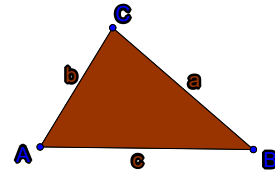
- When you _____ use _____
- _____

Law of Cosines

$$a^2 = b^2 + c^2 - 2bc \cos A$$

$$b^2 = a^2 + c^2 - 2ac \cos B$$

$$c^2 = a^2 + b^2 - 2ab \cos C$$



Solve $\triangle ABC$ where $a = 20$, $b = 18$, $c = 13$

Area of a Triangle given all Sides

_____ Formula

$$Area = \sqrt{s(s-a)(s-b)(s-c)}$$

- Where $s = \frac{a+b+c}{2}$

Find the area of a triangle with sides 14 cm, 21 cm, 27 cm