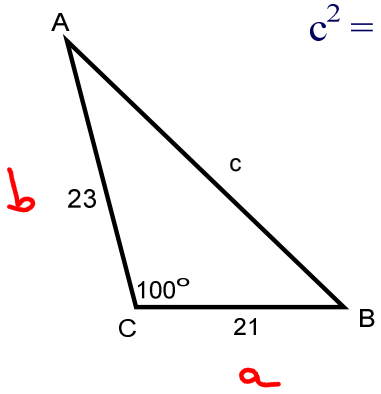
Law of Cosines

Law of Cosines: $a^2 = b^2 + c^2 - 2bc\cos A$

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

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

Choose the version based on what you're solving for.



$c^2 = 21^2 + 23^2 - 2(21)(23)\cos 100$

$c^2 = 441 + 529 - 966\cos 100$

$c^2 = 970 - 966\cdot\cos 100$

No! No! No!

$c^2 = 970 - (-167.74)$

$c^2 = 1137.74$

$c = 33.73$