Accelerated Precalculus
Quiz Review WS #1 : Laws of Sines & Cosines

Law of Cosines

$a^2 = b^2 + c^2 - 2bc(cosA)$
$b^2 = a^2 + c^2 - 2ac(cosB)$
$c^2 = a^2 + b^2 - 2ab(cosC)$

For #1 – 3, solve each triangle using the given information. Put your solutions for the **1st triangle** in the **top row** and for the **2nd triangle** (if there is one) use the **bottom row**.

1. ∠C = 36°, ∠B = 121°, b = 18

A_1 = _____ a_1 = _____

c_1 = _____

A_2 = _____ a_2 = _____

c_2 = _____

2. a = 38, b = 31, c = 35

A_1 = _____ B_1 = _____

C_1 = _____

A_2 = _____ B_2 = _____

C_2 = _____

3. ∠A = 62°, b = 10, a = 9

B_1 = _____ C_1 = _____

c_1 = _____

B_2 = _____ C_2 = _____

c_2 = _____

4. List different values of *a* that will produce the given number of triangles if A = 54° and *b* = 12.

Zero Triangles	One Triangle	Two Triangles
a = _____	a = _____	a = _____