The Law of Cosines

Formulas

$$a = \sqrt{b^2 + c^2 - 2bc\cos A} \qquad A = \cos^{-1}\left(\frac{b^2 + c^2 - a^2}{2bc}\right)$$

$$b = \sqrt{a^2 + c^2 - 2ac\cos B} \qquad B = \cos^{-1}\left(\frac{a^2 + c^2 - b^2}{2ac}\right)$$

$$c = \sqrt{a^2 + b^2 - 2ab\cos C} \qquad C = \cos^{-1}\left(\frac{a^2 + b^2 - c^2}{2ab}\right)$$

1. Solve each triangle
(Similar to p.278 #9-32)

A = 70°
b = 10
c=18

2. Solve each triangle
(Similar to p.278 #9-32)

a = 9
b = 5
c = 10

3. Solve each triangle
(Similar to p.278 #9-32)

a = 9
b = 8
c = 11