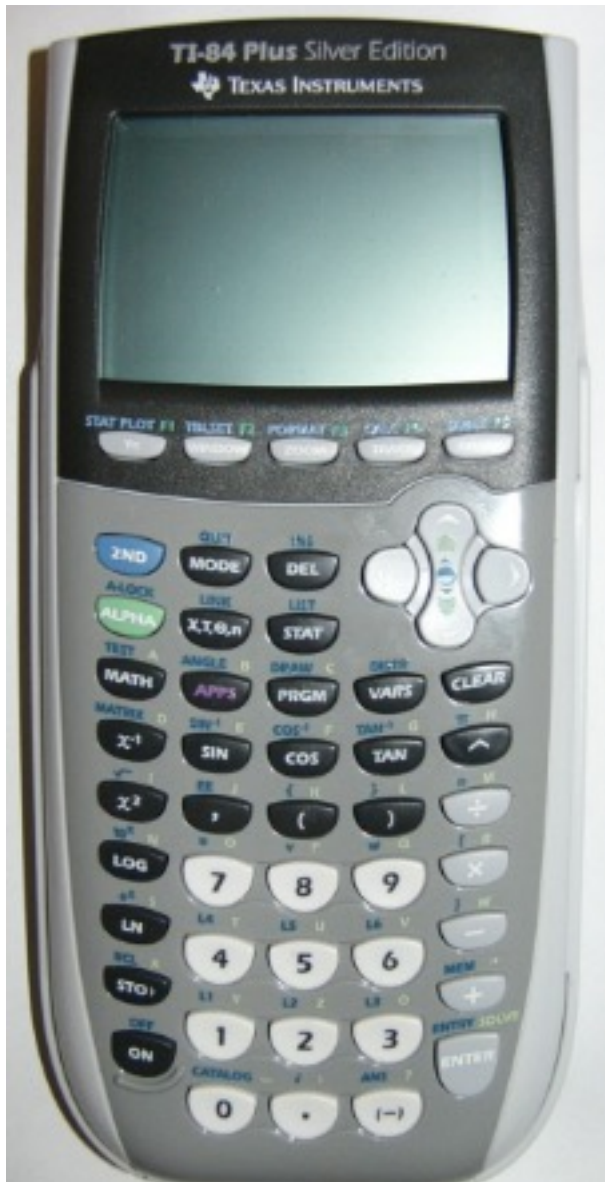


Mrs. Drolet's
Memory Aid Tips
Trigonometry
Cosine Law





It's always safe to verify that your calculator is in the Degree Mode

$$\sin 30^{\circ} = 0.5$$



Textbook p. 186

Cosine Law

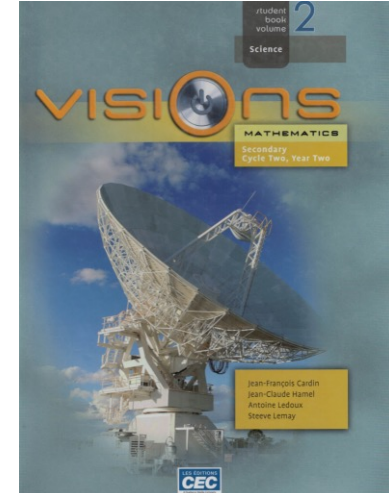
$$a^2 = b^2 + c^2 - 2bc \cos A$$

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

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

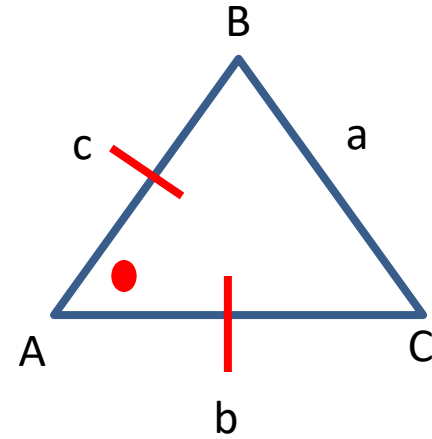
The cosine law allows you to solve any given triangle, providing you know the following:

- the lengths of two sides and the measure of the angle formed by these sides
- the lengths of the three sides of the triangle



Given:

- Measure of 2 sides
- Measure of angle between 2 sides



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

Diagram illustrating the Cosine Law equation $a^2 = b^2 + c^2 - 2bc \cos A$ with annotations:

- A box labeled "known angle" points to the angle A .
- A box labeled "2 known sides" points to the terms b^2 and c^2 .
- A box labeled "unknown side opposite known angle" points to the term a^2 .

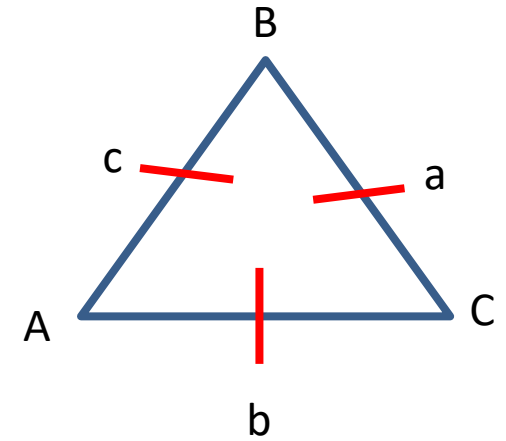


Cosine Law

Given:

- Measure of 3 sides

Choose an angle



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

Side opposite unknown angle

Other 2 known sides

unknown angle

