The cosine rule



What's the difference between b and B?

The diagram above can represent any triangle. There are three angles, A, B and C. Each angle faces a side, the side being named after the angle that faces it. So the side opposite angle A is called side a.

Does the cosine rule work for any triangle?

The cosine rule can be used for any triangle, right-angled or not. However, there are less complicated methods for finding sides and angles in right-angled triangles, so you will find you only need to use the cosine rule for non-right triangles.

What is the rule?

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

Why do I need the cosine rule?

