Vocabulary: Sum and Difference Identities for

Sine and Cosine



**Vocabulary**

* Identity – an equation that is true for all values.
* A *trigonometric identity* is an equation involving trigonometric functions that is true for all possible angles.
* The *sum and difference identities for sine* are:
* sin (*α* + *β*) = sin *α* cos *β* + cos *α* sin *β*
* sin (*α* – *β*) = sin *α* cos *β* – cos *α* sin *β*
* The *sum and difference identities for cosine* are:
* cos (*α* + *β*) = cos *α* cos *β* – sin *α* sin *β*
* cos (*α* – *β*) = cos *α* cos *β* + sin *α* sin *β*