Trigonometry Review

The three most common ratios are SINE (\(\sin\)), COSINE (\(\cos\)), and TANGENT (\(\tan\)). The sine ratio is between the opposite side and the hypotenuse, the cosine ratio is between the adjacent side and the hypotenuse, and finally the tangent ratio is between the opposite side and the adjacent side.

If \(\angle A\) is the reference angle.

\[
\sin A = \frac{\text{Opposite Side}}{\text{Hypotenuse}} = \frac{BC}{AC}
\]

If \(\angle C\) is the reference angle.

\[
\sin C = \frac{\text{Opposite Side}}{\text{Hypotenuse}} = \frac{AB}{AC}
\]

If \(\angle A\) is the reference angle.

\[
\cos A = \frac{\text{Adjacent Side}}{\text{Hypotenuse}} = \frac{AB}{AC}
\]

If \(\angle C\) is the reference angle.

\[
\cos C = \frac{\text{Adjacent Side}}{\text{Hypotenuse}} = \frac{BC}{AC}
\]

If \(\angle A\) is the reference angle.

\[
\tan A = \frac{\text{Opposite Side}}{\text{Adjacent Side}} = \frac{BC}{AB}
\]

If \(\angle C\) is the reference angle.

\[
\tan C = \frac{\text{Opposite Side}}{\text{Adjacent Side}} = \frac{AB}{BC}
\]