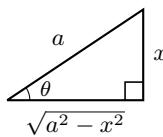
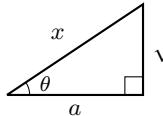
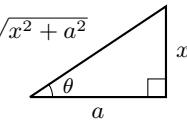


Summary of Trig Sub

If this appears in the integral...	Use this substitution...	Restriction on θ	Associated Triangle
$\sqrt{a^2 - x^2}$	$x = a \sin \theta$	$-\frac{\pi}{2} \leq \theta \leq \frac{\pi}{2}$	 $\sqrt{a^2 - x^2}$
$\sqrt{x^2 - a^2}$	$x = a \sec \theta$	$0 \leq \theta < \frac{\pi}{2}$ or $\pi \leq \theta < \frac{3\pi}{2}$	 $\sqrt{x^2 - a^2}$
$\sqrt{x^2 + a^2}$	$x = a \tan \theta$	$-\frac{\pi}{2} < \theta < \frac{\pi}{2}$	 $\sqrt{x^2 + a^2}$