If you see	use the sub	where	so that	and
$\sqrt{a^2-x^2}$	$x = a\sin\theta$	$-\frac{\pi}{2} \le \theta \le \frac{\pi}{2}$	$dx = a\cos\theta d\theta$	$\sqrt{a^2-x^2} = a\cos\theta$
$\sqrt{a^2+x^2}$	$x = a\tan\theta$	$-\frac{\pi}{2} < \theta < \frac{\pi}{2}$	$dx = a\sec^2\theta d\theta$	$\sqrt{a^2+x^2} = a\sec\theta$
$\sqrt{x^2-a^2}$	$x = a\sec\theta$	$0 \le \theta < \frac{\pi}{2}$ or $\pi \le \theta < \frac{3\pi}{2}$	$dx = a\sec\theta\tan\theta d\theta$	$\sqrt{x^2-a^2} = a\tan\theta$

Below are right triangles that show the relationship between a, x, and θ for $x = a\sin\theta$, $x = a\tan\theta$, and $x = a\sec\theta$, respectively.