Trig Integrals:

Integrals involving sin(x) and cos(x):	Integrals involving sec(x) and tan(x):
1. If the power of the sine is odd and positive: **Goal:** $u = \cos x$ i. Save a $du = \sin(x)dx$ ii. Convert the remaining factors to $\cos(x)$ (using $\sin^2 x = 1 - \cos^2 x$.)	1. If the power of $\sec(x)$ is even and positive: **Goal:** $u = \tan x$ i. Save a $du = \sec^2(x)dx$ ii. Convert the remaining factors to $\tan(x)$ (using $\sec^2 x = 1 + \tan^2 x$.)
2. If the power of the cosine is odd and positive: **Goal:** $u = \sin x$ i. Save a $du = \cos(x)dx$ ii. Convert the remaining factors to $\sin(x)$ (using $\cos^2 x = 1 - \sin^2 x$.)	2. If the power of $\tan(x)$ is odd and positive: **Goal:** $u = \sec(x)$ i. Save a $du = \sec(x)\tan(x)dx$ ii. Convert the remaining factors to $\sec(x)$ (using $\sec^2 x - 1 = \tan^2 x$.)
3. If both $\sin(x)$ and $\cos(x)$ have even powers: Use the half angle identities: i. $\sin^2(x) = \frac{1}{2}(1 - \cos(2x))$ ii. $\cos^2(x) = \frac{1}{2}(1 + \cos(2x))$	• If there are no sec(x) factors and the power of tan(x) is even and positive, use $\sec^2 x - 1 = \tan^2 x$ to convert one $\tan^2 x$ to $\sec^2 x$ • Rules for sec(x) and tan(x) also work for csc(x) and cot(x) with appropriate negative signs
If nothing else works, convert everything to sines and cosines.	