Trig Integrals:

Integrals involving sin/y) and sos/y):	Integrals involving socky) and tanky):
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:	1. If the power of $sec(x)$ is even and positive:
Goal: $u = \cos x$	Goal: $u = \tan x$
i. Save a $du = \sin(x)dx$ ii. Convert the remaining factors to $\cos(x)$ (using $\sin^2 x = 1 - \cos^2 x$.)	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:	2. If the power of tan(x) is odd and positive:
Goal: $u = \sin x$	$\mathbf{Goal}: u = \sec(x)$
i. Save a $du = \cos(x)dx$	i. Save a $du = \sec(x) \tan(x) dx$
ii. Convert the remaining factors to	ii. Convert the remaining factors to
$\sin(x) \text{ (using } \cos^2 x = 1 - \sin^2 x \text{ .)}$	$sec(x)$ (using $sec^2 x - 1 = tan^2 x$.)
3. If both $sin(x)$ and $cos(x)$ have even powers:	 If there are no sec(x) factors and the power of
Use the half angle identities:	$tan(x)$ is even and positive, use $sec^2 x - 1 = tan^2 x$
i. $\sin^2(x) = \frac{1}{2}(1 - \cos(2x))$	to convert one $\tan^2 x$ to $\sec^2 x$
ii. $\cos^2(x) = \frac{1}{2}(1 + \cos(2x))$	 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.	