

## Integrating trigonometric functions (by inspection)

$f(x)$	$f'(x)$
$\sin^{10}x$	
$\cos^{12}x$	
	$\sin^{10}x \cdot \cos x$
$\tan^{10}x$	
	$\tan^{10}x \cdot \sec^2x$
$\sec^{12}x$	
	$\sec^{10}x \cdot \tan x$
	$(1 - \sin^2x) \cdot \cos x$
	$\sin^3x$
	$\sin^5x$
	$\cos^5x$

$f(x)$	$f'(x)$
$\sin^{10}x$	
$\cos^{12}x$	
	$\sin^{10}x \cdot \cos x$
$\tan^{10}x$	
	$\tan^{10}x \cdot \sec^2x$
$\sec^{12}x$	
	$\sec^{10}x \cdot \tan x$
	$(1 - \sin^2x) \cdot \cos x$
	$\sin^3x$
	$\sin^5x$
	$\cos^5x$

0	$f'(x)$
$\sin^{10}x$	$10\sin^9x \cdot \cos x$
$\cos^{12}x$	$-12\cos^{11}x \cdot \sin x$
$\frac{1}{11} \cdot \sin^{11}x$	$\sin^{10}x \cdot \cos x$
$\tan^{10}x$	$10\tan^9x \cdot \sec^2x$
$\frac{1}{11} \cdot \tan^{11}x$	$\tan^{10}x \cdot \sec^2x$
$\sec^{12}x$	$12\sec^{12}x \cdot \tan x$
$\frac{1}{10} \cdot \sec^{10}x$	$\sec^{10}x \cdot \tan x$
$\sin x - \frac{1}{3} \cdot \sin^3x$	$(1 - \sin^2x) \cdot \cos x$
$\frac{1}{3} \cdot \cos^3x - \cos x$	$\sin^3x$
$\frac{2}{3} \cdot \cos^3x - \frac{1}{5} \cdot \cos^5x - \cos x$	$\sin^5x$
$\frac{1}{5} \cdot \sin^5x - \frac{2}{3} \cdot \sin^3x + \sin x$	$\cos^5x$

$f(x)$	$f'(x)$
$\sin^{10}x$	$10\sin^9x \cdot \cos x$
$\cos^{12}x$	$-12\cos^{11}x \cdot \sin x$
$\frac{1}{11} \cdot \sin^{11}x$	$\sin^{10}x \cdot \cos x$
$\tan^{10}x$	$10\tan^9x \cdot \sec^2x$
$\frac{1}{11} \cdot \tan^{11}x$	$\tan^{10}x \cdot \sec^2x$
$\sec^{12}x$	$12\sec^{12}x \cdot \tan x$
$\frac{1}{10} \cdot \sec^{10}x$	$\sec^{10}x \cdot \tan x$
$\sin x - \frac{1}{3} \cdot \sin^3x$	$(1 - \sin^2x) \cdot \cos x$
$\frac{1}{3} \cdot \cos^3x - \cos x$	$\sin^3x$
$\frac{2}{3} \cdot \cos^3x - \frac{1}{5} \cdot \cos^5x - \cos x$	$\sin^5x$
$\frac{1}{5} \cdot \sin^5x - \frac{2}{3} \cdot \sin^3x + \sin x$	$\cos^5x$