Integration Review 2017

$\int 2x\left(x^2+2\right)^3 dx$	$\int 6x^2 e^{x^3} dx$	$\int x^3 \ln x dx$	$\int \frac{1}{16x^2+1} dx$	$\int \frac{10}{10x+5} dx$
$\int_0^1 \frac{2x dx}{\left(x^2+1\right)^{1/5}}$	$\int \frac{x^3+1}{\sqrt{x^4+4x}} dx$	$\int \frac{1}{x^2-9} dx$	$\int \cos^{10} x \sin x dx$	$\frac{dy}{dx} = \frac{x^2}{y}$ $y(0)=2$
$\int 3x^2 \sin\left(x^3\right) dx$	$\int \frac{3x+11}{x^2-x-6} dx$	$\int \frac{9x^2}{x^3+6} dx$	$\int_{-\infty}^{\infty} e^{-5x} dx$	$\int xe^x dx$
$\int_0^5 \frac{1}{x-5} dx$	$\int 5x^4 e^{x^5} dx$	$\frac{dy}{dx} = 3x^2 y$ $y(0)=1$	$\int (x+2)\sin(x) dx$	$\int \frac{2x-1}{x^2-x-6} dx$
$\int \frac{\ln^9 x}{x} dx$	$\int \left(x^2+1\right)\cos\left(x^3+3x\right) dx$	$\int \frac{1}{x^2+9} dx$	$\int \frac{e^{2x}}{1+e^{2x}} dx$	$\int \frac{\cos x}{(\sin x)^6} dx$