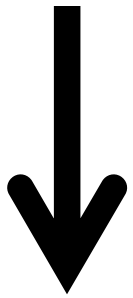
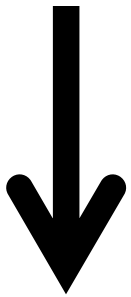
Formula ($\int x^5\,dx$, $\int \cos x\,dx$, $\int \sec^2 x\,dx$)



Substitution (has an inside, its derivative is outside)



Integration by parts (product of functions)

1) $\int x\sqrt{x+1}\,dx$

2) $\int \sin 2\theta\, e^{\cos(2\theta)}\,d\theta$

3) $\int \tan^{-1} x\,dx$ [Consider how we found $\int \ln x\,dx$]

4) $\int ze^{z+2}\,dz$

5) $\int \frac{\sin(t^{0.6})}{t^{0.4}}\,dt$

6) $\int x\ln(x^2)\,dx$

7) $\int \frac{x}{e^x}\,dx$

8) $\int \frac{(\ln x)^2}{x}\,dx$

9) $\int x^7 \ln x\,dx$