

## Integration by Substitution (I)

1.  $\int \frac{1}{x \ln x} dx$ , provided  $x > 0$
2.  $\int \frac{2x}{\sqrt{x^2+1}} dx$
3.  $\int \frac{3x^2}{(x^3+3)\sqrt{x^3+3}} dx$
4.  $\int \frac{(x+3)^2}{x^2+4} dx$
5.  $\int x\sqrt{x-2} dx$ , provided  $x > 5$