1. $\displaystyle\int_{2}^{\infty} \frac{1}{(x+1)^3}\, dx \;=\;$

1. $\displaystyle\int_0^\infty \frac{e^x}{e^{2x}+1}\, dx \ =$

1. $\displaystyle\int_{2}^{\infty} \frac{\cos{(\pi/x)}}{x^2}\, dx \;=\;$

1. $\displaystyle \int_1^\infty \frac{dx}{x^2 + x} \;=\;$