1. $\displaystyle\int \frac{1}{\sqrt{x^2-1}}\, dx\ =$

1. $\displaystyle\int \frac{1}{x^2\sqrt{4-x^2}}\,dx \ =$

1. $\displaystyle \int \frac{1}{\sqrt{4 + x^2}}\, dx \ =$

1. $\displaystyle\int \sqrt{4 - x^2}\, dx \;=\;$