Exercise 1. $\displaystyle \int \frac{x^2}{\sqrt{9-x^2}}dx$

Exercise 2. $\displaystyle \int_0^a \frac{dx}{(a^2+x^2)^{3/2}}$, for a constant $a > 0$.

Exercise 3. $\displaystyle \int \frac{dx}{\sqrt{x^2+2x+5}}$

Exercise 4. $\int \sqrt{1 - x^4}\, dx$

Exercise 5. $\int \frac{x}{\sqrt{x^2 - 7}}\, dx$

Exercise 6. $\int_0^1 \frac{dx}{(x^2 + 1)^2}$

Exercise 7. $\int_0^2 \frac{dt}{\sqrt{4 + t^2}}$