1. $\int \sin^2 x \cos x \, dx$

2. $\int \frac{\sqrt{\ln x}}{x} \, dx$

3. $\int \frac{x^2}{(x^3+2)^2} \, dx$

4. $\int x\sqrt{1-x^2}$

5. $\int \frac{1+3x^2}{x(1+x^2)} \, dx$

6. $\int \frac{x^3}{x^8+1} \, dx$

7. $\int \frac{dx}{\sqrt{a-bx^2}} \, dx$

8. $\int \cos^2 x \, dx$

9. $\int \tan^2 x \, dx$

10. $\int \frac{1+\cos^2 x}{1+\cos 2x} \, dx$