1. $\int \sin^2 x \cos^3 x \, dx$

2. $\int \sin^3 x \cos^3 x \, dx$

3. $\int \cos^2(2t) \, dt$

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

5. $\int \tan^3 x \sec^4 x \, dx$

6. $\int \tan^2 u \sec u \, du$

7. $\int \sec^4 x \, dx$

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

9. $\int \sqrt{9+x^2} \, dx$

10. $\int \dfrac{dx}{\sqrt{x^2 - 7}}$

11. $\int \dfrac{dx}{\sqrt{5 - x^2}}$

12. $\int \dfrac{dx}{x\sqrt{x^2 + 9}}$

13. Asagidaki integralleri hesaplayiniz.

(a) $\int \dfrac{\sin^3 \sqrt{x}}{\sqrt{x}} dx$

(b) $\int \cos\theta \cos^5(\sin\theta) d\theta$

(c) $\int x \sin^3 x \, dx$

(d) $\int \cot^5 \theta \sin^4 \theta \, d\theta$

(e) $\int \cos^2 x \sin 2x \, dx$

(f) $\int \tan^2 \theta \sec^4 \theta \, d\theta$

(g) $\int \tan^5 \theta \sec^3 \theta d\theta$