

Evaluate the integral.

1. $\int 3x\sqrt{1-2x^2}dx$

2. $\int \frac{(1+x)^2}{\sqrt{x}}dx$

3. $\int \frac{x+2}{x+1}dx$

4. $\int \frac{e^{2/x}}{x^2}dx$

5. $\int \frac{dx}{e^x+1}$

6. $\int \tan x dx$

7. $\int \frac{dx}{1+\cos x}$

8. $\int \csc u du$

9. $\int \frac{dx}{x\sqrt{x^4-1}}$

10. $\int \frac{dx}{e^x+e^{-x}}$

11. $\int \frac{dx}{\sqrt{20+8x-x^2}}$

12. $\int \frac{dx}{2x^2+2x+5}$

13. $\int \frac{x+1}{x^2-4x+8}dx$

14. $\int \frac{x+3}{\sqrt{5-4x-x^2}}dx$

15. $\int \frac{x+2}{\sqrt{4x-x^2}}dx$

16. $\int \frac{e^x-1}{e^x+1}dx$

17. $\int \frac{dx}{x+x^{1/3}}$

18. $\int \tan^2 x dx$

19. $\int_0^{\pi/4} \tan^3 x dx$

20. $\int_e^{e^4} \frac{dx}{x\sqrt{\ln x}}$