

Evaluate each integral.

1. $\int \frac{dx}{x^2+9}$	2. $\int \frac{9r^2}{\sqrt{1-r^3}} dr$	3. $\int \cos(3z+4) dz$	4. $\int \frac{dx}{\sin^2 3x}$
5. $\int \frac{6 \cos t}{(2+\sin t)^2} dt$	6. $\int \frac{x}{x^2+1} dx$	7. $\int \frac{40}{x^2+25} dx$	8. $\int \frac{dx}{\sqrt{1-4x^2}}$
9. $\int \frac{2y}{4y^2-1} dy$	10. $\int \frac{dx}{\sqrt{9-x^2}}$		

Answers:

1. $\left(\frac{1}{3}\right) \tan^{-1}\left(\frac{x}{3}\right) + C$	2. $-6\sqrt{1-r^3} + C$	3. $\frac{1}{3} \sin(3z+4) + C$	4. $-\frac{1}{3} \cot(3x) + C$
5. $-\frac{6}{2+\sin t} + C$	6. $\frac{1}{2} \ln(x^2+1) + C$	7. $8 \tan^{-1}\left(\frac{x}{5}\right) + C$	8. $\sin^{-1}(2x) + C$
9. $\frac{1}{4} \ln 4y^2-1 + C$	10. $\sin^{-1}\left(\frac{x}{3}\right) + C$		