

AP Calculus Integration with Trigonometric Substitution Wkst

Integrate each.

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

2. $\int \frac{3dx}{\sqrt{9x^2-1}}$

3. $\int \sqrt{25-x^2} dx$

4. $\int_0^{3/2} \frac{dx}{\sqrt{9-x^2}}$

5. $\int_0^{\frac{1}{2\sqrt{2}}} \frac{2dx}{\sqrt{1-4x^2}}$

6. $\int_{-2}^2 \frac{dx}{4+x^2}$

7. $\int_0^2 \frac{dx}{\sqrt{4+x^2}}$

