

Harder Integration (calculator free)

1. $\int \frac{x+3}{x^2+4a^2} dx$

2. $\int \frac{x^2+4a^2}{x+3} dx$

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

4. $\int_{-a}^a \sin(x^3) dx$

5. $\int e^{-ax} x dx$

6. $\int \frac{3x+5}{4x^2+3x+5} dx$

7. Find the area of an ellipse with semi-major and semi-minor axes a and b respectively.

Ans

Check your ans using your calculator