

Computing Derivatives Part 7

Fractional Exponents

Radicals

Derivatives of logarithms

Variables to variable powers

Examples:

1. $y = \sqrt{x} = x^{\frac{1}{2}}$

2. $y = x^{\frac{5}{3}} = (\sqrt[3]{x})^5 = \sqrt[3]{x^5}$

3. $y = \sqrt{\sin(x)}$

4. $y = x^{\frac{p}{q}}$

5. $y = \ln(x)$

6. $y = \ln(\sin(x))$

7. $y = \log(x^2 + 2x)$

8. $y = x^x$