Computing Derivatives Part 6

Notation

Second and higher derivatives

Second derivatives of Implicit relations

Examples:

1. $d\left(\sin\left(u\right)\right)$

2. $y=\sin\left(3x\right)$

3. $y=x^3$

4. $y=\sin\left(x\right)$

5. $y=e^x$

6. $y=e^{x^2}$

7. $x^2+y^2=25$

8. $3y^2-2x^2=6-2xy \quad \text{at } (3,2)$

   $y'=\dfrac{2x-y}{3y+x} \text{ at } (3,2)\ y'=\dfrac{4}{9}$