

Math Sheet #8

Due July 29, 2006

Name: ..... Date: .....

$\frac{d}{dx} 8 =$	$\frac{d}{dx} 2x^3 =$	$\frac{d}{dx} (2x^2 + 3x) =$	$\frac{d}{dy} (5y^3 - y^2 + 2y - 3)$
solve $x (x = 3)$	solve $(y=3; c=2)$	Solve $(y = 2)$	Solve $(y=2)$
$\frac{d}{dx} e^x =$	$\frac{d}{dy} c^y =$	$\frac{d}{dy} \ln(y) =$	$\frac{d}{dy} (y^3 - 5y^2 + 8y - 3)$

Power of  $x$ .

$$\frac{d}{dx} c = 0 ; \frac{d}{dx} x = 1 ; \frac{d}{dx} x^n = n x^{(n-1)}$$

Exponential / Logarithmic

$$\frac{d}{dx} e^x = e^x ; \frac{d}{dx} b^x = b^x \ln(b) ; \frac{d}{dx} \ln(x) = 1/x$$