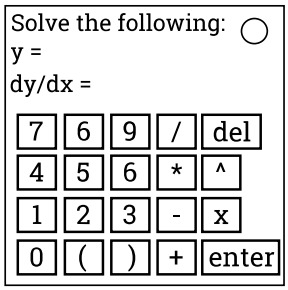
On the Subject of Derivatives



Do you remember high school maths? Time to find out.

Solve the module by solving all differential equations, normal mathematical rules apply.

You will need to solve the equations an amount of times equal to the bomb's starting time (in minutes) divided by 3, rounded up (max 10).

Entering an incorrect answer for an equation will cause a strike, but will still count as solving the equation.

If you enter something which the calculator isn't able to compute the buttons will flash red, but you will not get a strike.

Any correct derivative is accepted, you do not have to simplify.

Assume x is positive.

See Appendix A for basic differentiation rules.

Appendix A: Differentiation rules

$\frac{d}{dx}(c) = 0$	where c is a constant
$\frac{d}{dx}(x^n) = nx^{n-1}$	where n is any real number
$\frac{d}{dx}(\ln x) = \frac{1}{x}$	where $x > 0$
$\frac{d}{dx}(e^x) = e^x$	
$\frac{d}{dx}(\sin x) = \cos x$	
$\frac{d}{dx}[f(x) + g(x)] = f'(x) + g'(x)$	
$\frac{d}{dx}[f(x) - g(x)] = f'(x) - g'(x)$	
$\frac{d}{dx}[f(x)g(x)] = f(x)g'(x) + g(x)f'(x)$	
$\frac{d}{dx}f(g(x)) = f'(g(x))g'(x)$	