$\frac{d(t^3)}{dt} =$

$\frac{d(m^7)}{dm} =$

$9ul$

$\frac{d(y^3)}{dx} =$

$3y^2\frac{dy}{dx}$

$3x^2\frac{dx}{dy}$

$\frac{d(x^3)}{dy} =$

$\frac{d(\sin\theta)}{d\theta} =$

$\cos\theta$

$\frac{d(\sin\theta)}{dx} =$

$2x^2 - xy + y^2 = 28$

An equation of the tangent at (3,5) *is*

$\frac{d(x^3)}{dx} =$

$\frac{d(5x^4)}{dx} =$

$20x^3$

$x^2 + y^2 - 3y - 2 = 0$

An equation of the tangent at (2,1) *is*

$3t^2$

$y = 4x - 7$

$2xy^2 - x^3y = 0$

$\frac{dy}{dx} =$

$4x^2 - 2xy + 3y^2 = 8$

$\frac{dy}{dx} =$

$y = 8 - x$

$x - 3y$

$4x - y$

$y^4 = x^2 - 6x + 2$

$\frac{dy}{dx} =$

$y = 18 - 4x$

$2x - y + y^2 = 0$

$\frac{dy}{dx} =$

$\frac{x - 3}{2y^3}$

$x^2 + 4xy - 3y^2 - 36 = 0$

An equation of the tangent at (4,2) *is*

$\cos\theta\frac{d\theta}{dx}$

$-\sin\theta\frac{d\theta}{dx}$

$\frac{d(\cos\theta)}{dx} =$

$\frac{d(\tan\theta)}{dm} =$

$\sec^2\theta\frac{d\theta}{dm}$

$3x^2$

$\frac{d}{dx}[x^2 + y^2 + y] =$

$2x + \frac{dy}{dx}(2y + x) + y$

$\frac{d}{dx}[x^2 + y^2 - xy] =$

$x - (x - 2)\frac{dy}{dx}$

$2x + \frac{2y^2 - 3x^2y}{x^3 - 4xy}$

$3x^2 + (2y - 6xy)\frac{dy}{dx} - 3y^2 =$

$\frac{d}{dx}[x^3 + y^2 - 3xy^2] =$

$y - x$

$\frac{-y\ln y}{2y^2 + x}$

$2x + 3y^2\frac{dy}{dx}$

$\frac{2}{1 - 2y}$

$\frac{dy}{dx} =$

$x^2 + y^2 = 2$

$\frac{2y + 1}{2(x - 2)}$

$\ln(x - 2) = \ln(2y + 1)$

$\frac{dy}{dx} =$

$x^2\frac{dy}{dx} + 2xy$

$u\frac{dv}{dx} + v\frac{du}{dx}$

u and v are functions of x

$\frac{d}{dx}[uv] =$

$\frac{d}{dx}[x^2y^3] =$

$3x^2y^2\frac{dy}{dx} + 2xy^3$

$\frac{d}{dx}[x^3y^2] =$

$2x^3y\frac{dy}{dx} + 3x^2y^2$

$x\frac{dy}{dx} + y$

$\frac{d}{dx}[xy] =$

$2xy^2\frac{dy}{dx} + y^2$

$= [2xy\frac{dy}{dx} + y^2]$

$\frac{d}{dx}[x^2y] =$

$y^2 + xdxy = 3$

$\frac{dy}{dx} =$

$= [x^2 + y^3]\frac{dx}{d}$