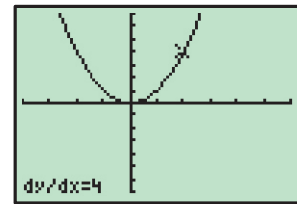## THE TANGENT TO A FUNCTION
TI-84 Plus

To find the gradient of the tangent to $y = x^2$ when $x = 2$, we first draw the graph of $y = x^2$. Press [2nd] [TRACE] (**CALC**) **6 : dy/dx**, then press 2 [ENTER] . The tangent has a gradient of 4 at this point.

dy/dx=4

To find the equation of the tangent, press [2nd] [PRGM] (**DRAW**) **5 : Tangent**, then press 2 [ENTER] . The tangent has equation $y = 4x - 4$.

X=2
y=4X+-4