**Lesson 5 Student Assignment 2**

**Task:**

1. Open the geogebra file: <https://www.projectmaths.ie/geogebra/rates-of-change-of-a-quadratic-function/>
2. Choose an integer value between -10 and +10 (Call this value a).
3. Input a new function f(x)=ax2. (For example input f(x)=2x2)
4. Let P be any point (x, y) on the function.
5. Use the geogebra file to help you to investigate the problem below.
6. Please submit your solution (and any supporting arguments) by 08:00 tomorrow.

Problem:

Can you find the relationship between xand the slope of the tangent at P for your chosen function?