**Derivatives of exponential functions**

Consider the function $f(x) = e^x$ where *e* is the irrational number approximately equal to 2.72. Complete the following table to find the formula for $f'(x)$. Round your answers to two decimal places.

| **Value of *x*** | $f(x) = e^x$ | **Slope of tangent line to *f*(*x*) at the given value of *x*** |
|---|---|---|
| **-2** | | |
| **0** | | |
| **1** | | |
| **5** | | |

What would you say is the formula for $f'(x)$?

Consider the function $f(x) = e^{2x}$ where *e* is the irrational number approximately equal to 2.72. Complete the following table to find the equation for $f'(x)$. Round your answers to two decimal places.

| **Value of *x*** | $f(x) = e^{2x}$ | **Slope of tangent line to *f*(*x*) at the given value of *x*** |
|---|---|---|
| **-2** | | |
| **0** | | |
| **1** | | |
| **5** | | |

What would you say is the formula for $f'(x)$?