

UNFORGIVABLE ERRORS

(1) Do NOT say that $(a + b)^2 = a^2 + b^2$.

(2) Do NOT say that $\sqrt{a + b} = \sqrt{a} + \sqrt{b}$.

(3) Do NOT say that $\frac{1}{a + b} = \frac{1}{a} + \frac{1}{b}$.

(4) Do NOT say that $\cos(a + b) = \cos(a) + \cos(b)$, or $\sin(a + b) = \sin(a) + \sin(b)$ (or any other trig function).

(5) Do NOT say that $e^{a+b} = e^a + e^b$ or that $\log(a + b) = \log(a) + \log(b)$.

(6) Do NOT say that $\frac{d}{dx} (f(x)g(x)) = f'(x)g'(x)$. You should know by now when/how to use the product rule!

(7) Do NOT say that $\int f(x)g(x) dx = \left(\int f(x) dx \right) \left(\int g(x) dx \right)$.