

SHEET #342:

NAME: _____

CHAIN RULE = ALGEBRAICALLY

PERIOD: _____

$$\frac{d}{dx} f(g(x)) = f'(g(x)) \cdot g'(x).$$

$$1. \frac{d}{dx} (x+1)^3 =$$

$$2. \frac{d}{dx} (2x+1)^3 =$$

$$3. \frac{d}{dx} (x^2+1)^3 =$$

$$4. \frac{d}{dx} e^{x^2} =$$

$$5. \frac{d}{dx} \sin(e^x) =$$

$$6. \frac{d}{dx} e^{\sin x} =$$

$$7. \frac{d}{dx} \sin x^2 =$$

$$8. \frac{d}{dx} \sin(e^{x^2}) =$$

$$9. \frac{d}{dx} x \sin(x^2) =$$

$$10. \frac{d}{dx} \frac{\sqrt{\sin e^x}}{x} =$$