

$$1. y = x^5 - 0.125x^2 + 0.25x$$

$$y' = 5x^4 - 0.25x + 0.25$$

$$2. y' = -0.7 \cdot 3x^2 + 0.3 \cdot 7x^6$$

$$3. y' = 3x^2 - 3(2x)$$

$$4. y = 7x^1 + \sqrt{7}$$

$$5. y' = (x+1)^2(2x+2) + 2(x+1)(1)(x^2+2x+1)$$

$$6. y' = (2x-5)(-1)(4-x)^{-2}(-1) + (2)(4-x)^{-1}$$

$$7. y' = 3(\theta^2 + \sec\theta + 1)^2(2\theta + \sec\theta \tan\theta)$$

$$8. y' = 2\left(-1 - \frac{\cos\theta}{2} - \frac{\theta^2}{4}\right)\left(-\frac{\sin\theta}{2} - \frac{2\theta}{4}\right)$$

$$9. s' = \frac{\sqrt{t}}{1+\sqrt{t}}$$

$$= \frac{(1+\sqrt{t}) \frac{1}{2\sqrt{t}} - \frac{1}{2\sqrt{t}} \sqrt{t}}{(1+\sqrt{t})^2}$$

$$10. s' = -(\sqrt{t}-1)^{-2} \cdot \frac{1}{2\sqrt{t}}$$

$$11. y' = 2 \cdot 2 \quad \text{no!}$$