

$$1.) y' = \frac{\pi \cos(\pi t)}{3 \sin^{2/3}(\pi t)}$$

$$13.) y' = \frac{5 \sec^2(5x)}{2 \sqrt{\tan 5x}}$$

$$2.) y' = 8x^3(2x-5)^3 + 3x^2(2x-5)^4$$

$$14.) y' = 3 \sin^2 x \cos x + \downarrow$$

$$3.) y' = -\csc x \cot x - \frac{2}{\sqrt{x}}$$

$$8 \sin x \cos x$$

$$4.) y' = -\sin^4(x) + 3 \sin^2 x \cos^2 x$$

$$5.) y' = \frac{-x \sin x}{2 \sqrt{\cos x}} + \sqrt{\cos x}$$

$$6.) y' = -12 \csc^3(2x) \cot(2x) + 8x$$

$$7.) y' = \frac{5 \tan(3x^2) - 30x^2 \sec^2(3x^2)}{\tan^2(3x^2)}$$

$$8.) y' = 6x \sec(3x^2) \tan(3x^2)$$

$$9.) y' = 6x \cos(3x+1) \sin(3x+1) - \cos^2(3x+1)$$

$$10.) y' = 72 t^2 \sec^4(6t^3) \tan(6t^3)$$

$$11.) y' = 12 \sin^2(4t) \cos(4t)$$

$$12.) y' = 2(9t^2 - 1) \cot(3t^3 - t) \csc^2(3t^3 - t)$$