

$$1) Y = 3x^7 - 4x + 10$$

$$Y' = -4 + 21x^6$$

$$2) Y = 2/x^3 - x^{10}/10 + 4\sqrt{x}$$

$$Y' = -\frac{6}{x^4} + \frac{2}{\sqrt{x}} - x^9$$

$$3) Y = (2x^4 - 1)\cos[x]$$

$$Y' = 8x^3\cos[x] - (-1 + 2x^4)\sin[x]$$

$$4) Y = (x + 5)/\sin[x]$$

$$Y' = 1/\sin[x] - (x+5)\cos[x]/\sin[x]^2$$

$$5) Y = (2x^4 - 4)(x + 3)$$

$$Y' = -4 + 24x^3 + 10x^4$$

$$6) Y = (5x^5 - 3)^9$$

$$Y' = 225x^4(-3 + 5x^5)^8$$

$$7) Y = \sqrt{x^2 + 4}$$

$$Y' = \frac{x}{\sqrt{4+x^2}}$$