February 23, 2015

Abstract

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(i)

$$f(x) = x^2$$

(ii)

$$f(x) = 2x + 2$$

(iii)

$$f(x) = \frac{1}{2}x^2$$

(iv)

$$f(x) = 2x^2 + 4x + 4$$

(v)

$$f(x) = \sqrt{x+2}$$

(vi)

$$f(x) = \frac{1}{x}$$

(vii)

$$f(x) = \frac{3}{x+1}$$

(viii)

$$f(x) = \frac{1}{\sqrt{x+1}}$$

(ix)

$$f(x) = \frac{x}{x+2}$$

(x)

$$f(x) = 2x^2 + 4$$

(xi)
$$f(x) = 3\sqrt[3]{x} < /math >$$

(xii)
$$f(x) = 2x^5 + 8x^2 + x - 78$$

(xiii)
$$f(x) = 7x^7 + 8x^5 + x^3 + x^2 - x$$

(xiv)
$$f(x) = \frac{1}{x^2} + 3x^{\frac{1}{3}}$$

(xv)
$$f(x) = 3x^{15} + \frac{1}{17}x^2 + \frac{2}{\sqrt{x}}$$

(xvi)
$$f(x) = \frac{3}{x^4} - \sqrt[4]{x} + x$$

(xvii)
$$f(x) = 6x^{1/3} - x^{0.4} + \frac{9}{x^2}$$

(xviii)
$$f(x) = \frac{1}{\sqrt[3]{x}} + \sqrt{x}$$

(xix)
$$f(x) = (x^4 + 4x + 2)(2x + 3)$$

(xx)
$$f(x) = (2x - 1)(3x^2 + 2)$$

(xxi)
$$f(x) = (x^3 - 12x)(3x^2 + 2x)$$

(xxii)
$$f(x) = (2x^5 - x)(3x + 1)$$

(xxiii) .
$$f(x) = (5x^2 + 3)(2x + 7)$$

(xxiv) .
$$f(x) = 3x^2(5x^2 + 1)^4$$

(xxv) .
$$f(x) = x^3(2x^2 - x + 4)^4$$

(xxvi) .

$$f(x) = 5x^2(x^3 - x + 1)^3$$

(xxvii) .

$$f(x) = (2 - x)^6(5 + 2x)^4$$

(xxviii)

$$f(x) = \frac{2x + 1}{x + 5}$$

(xxix)

$$f(x) = \frac{3x^4 + 2x + 2}{3x^2 + 1}$$

(xxx)

$$f(x) = \frac{x^{\frac{3}{2}} + 1}{x + 2}$$

(xxxi)

$$f(x) = \frac{x^2 + x}{2x - 1}$$

(xxxii)

$$f(x) = \frac{x + 1}{2x^2 + 2x + 3}$$

(xxxiii)

$$f(x) = \frac{16x^4 + 2x^2}{x}$$

(xxxiv)

$$f(x) = (x + 5)^2$$

(xxxv)

$$f(x) = \sqrt{1 - x^2}$$

(xxxvi)

$$f(x) = \frac{(2x + 4)^3}{4x^3 + 1}$$

(xxxvii)

$$f(x) = (2x + 1)\sqrt{2x + 2}$$

(xxxviii)

$$f(x) = \frac{2x + 1}{\sqrt{2x + 2}}$$

(xxxix)

$$f(x) = \sqrt{2x^2 + 1}(3x^4 + 2x)^2$$

(xl)

$$f(x) = \frac{2x+3}{(x^4+4x+2)^2}$$

(xli)

$$f(x) = \frac{2x+3}{(x^4+4x+2)^2}$$

(xlii)

$$f(x) = 3e^x - 4\cos(x) - \frac{1}{4}\ln x$$

(xliii)

$$f(x) = \sin(x) + \cos(x)$$