calculo

Nombre del docente: gorge enrique

Presenta:examen

Alumno: Luis Escandón

Semestre: 4

Técnico: enfermería

Semiescolarizado

Fecha de entrega: 09/06/2020

$$y' = \text{arccot}\, 2x^3 = -\frac{6x^2}{1+(2x^3)^2} = -\frac{6x^2}{1+4x^6}$$

$$y' = \text{arccsc}\, 10x^3 = -\frac{80x^3}{80x^3\sqrt{(10x^3)^2-1}} = -\frac{80x^3}{80x^3\sqrt{100x^6-1}} = -\frac{1}{\sqrt{100x^6-1}}$$

$$y' = \arctan 30x^8 = \frac{240x^7}{1+(30x^8)^2} = \frac{240x^7}{1+900x^8}$$

$$y' = \arctan 15x^3 = \frac{45x^2}{1+(15x^3)^2} = \frac{45x^2}{1+225x^6}$$

$$y' = \arccos 3x^4 = -\frac{12x^3}{\sqrt{1+(3x^4)^2}} = -\frac{12x^3}{\sqrt{1+9x^8}}$$

$$y' = \text{arccsc}\, 4x^4 = -\frac{16x^3}{16x^3\sqrt{(4x^4)^2-1}} = -\frac{16x^3}{16x^3\sqrt{16x^8-1}} = -\frac{1}{\sqrt{16x^8-1}}$$

$$y' = \text{arcsec}\, 12x^4 = \frac{48x^3}{12x^4\sqrt{(12x^4)^2-1}} = \frac{48x^3}{12x^4\sqrt{144x^8-1}}$$

$$y' = \arctan 40x^3 = \frac{120x^2}{1+(40x^3)^2} = \frac{120x^2}{1+1600x^6}$$