

**Tec. Enfermería**

**Profe. Jorge Enrique  
Albores Aguilar**

**PRESENTA EL ALUMNO:**

**Marlon Iván Alpirez González**

**GRUPO, SEMESTRE y MODALIDAD:**

**4to. Semestre y grupo A, Calculo.**

**Fecha: 09/07/2020**

$$-y' = \operatorname{arccsc} 10x^8$$

$$F'(x) = \frac{u'}{u\sqrt{u^2-1}}$$

$$\frac{10x^8}{10x^8\sqrt{(10x^8)^2-1}} \quad \frac{10x^8}{10x^8\sqrt{20x^{16}-1}}$$

$$R = \frac{1}{\sqrt{20x^{16}-1}}$$

$$-y' = \operatorname{arctan} 30x^8$$

$$\operatorname{arctan} u = \frac{u'}{1+u^2}$$

$$\frac{30x^8}{1+(30x^8)^2} = \frac{30x^8}{1+60x^{16}}$$

$$-y' = \operatorname{arctan} 15x^3$$

$$\operatorname{arctan} u = \frac{u'}{1+u^2}$$

$$\frac{15x^3}{1+(15x^3)^2} = \frac{15x^3}{1+30x^6}$$

Marlon Iván  
Alpírez González

$$-y' = \operatorname{arccos} 3x^4$$

$$u = \frac{u'}{u\sqrt{u^2-1}}$$

$$\frac{3x^4}{3x^4\sqrt{(3x^4)^2-1}} \quad \frac{3x^4}{3x^4\sqrt{6x^8-1}} \quad R = \frac{1}{\sqrt{6x^8-1}}$$

$$-y' = \operatorname{arccsc} 4x^4$$

$$u = \frac{u'}{u\sqrt{u^2-1}}$$

$$\frac{4x^4}{4x^4\sqrt{(4x^4)^2-1}} \quad \frac{4x^4}{4x^4\sqrt{8x^8-1}} \quad R = \frac{1}{\sqrt{8x^8-1}}$$

$$- y' = \operatorname{arccsc} 12x^4 \quad \operatorname{arccsc} u = \frac{u'}{u \sqrt{u^2 - 1}}$$

$$\frac{12x^4}{12x^4 \sqrt{(12x^4)^2 - 1}} = \frac{12x^4}{12x^4 \sqrt{144x^8 - 1}}$$

$$- \varphi' = \arctan 40x^3 \quad \arctan u = \frac{u'}{1 + u^2}$$

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

$$- y' = \arccos 4x^6 \quad u = \frac{u'}{u' \sqrt{u^2 - 1}}$$

$$\frac{4x^6}{4x^6 \sqrt{(4x^6)^2 - 1}} = \frac{4x^6}{4x^6 \sqrt{16x^{12} - 1}} = R = \frac{1}{\sqrt{16x^{12} - 1}}$$

$$- y' = \arctan 6x^3 \quad \arctan u = \frac{u'}{1 + u^2}$$

$$\frac{6x^3}{1 + (6x^3)^2} = \frac{6x^3}{1 + 36x^6}$$

Marlon Iván  
Alpírez González