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- Materia: calculo
 - Carrera: tec. enfermería
 - Semestre
 - Brenda mayari Alvarado bravo
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$$1. y = \arctan \frac{1}{2}x^4$$

$$\frac{4}{2}x^3 = 2x^3$$

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

$$\frac{u'}{1+u^2}$$

$$2. y = \operatorname{arccsc} \sqrt{2x^3}$$

$$y = \operatorname{arccsc} (2x^3)^{1/2}$$

$$\left(\frac{2x^3}{2}\right)^{1/2-1}$$

$$(x^3)^{-1/2}$$

$$\left(\frac{1}{x^3}\right)^{1/2}$$

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

$$\frac{1}{(x^3)^{1/2}}$$

$$\frac{1}{(x^3)^{1/2}} \sqrt{2x^3}^{-2}$$

$$3. y = \operatorname{arcsec} 9x^8$$

$$\frac{32x^7}{4x^8 \sqrt{16x^8-1}}$$

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

$$y = \arcsin 2x$$

$$\frac{2}{\sqrt{1-4x^2}}$$

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

$$2x^2$$

5. $y = \text{arc sec } 2x^2$

$$\frac{4x}{4x\sqrt{2x^2-1}}$$

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

6. $y = \text{arc tan } 8x^2$

$$\frac{16x}{1+8x^2}$$

$$\frac{u'}{1+u^2}$$

7. $y = \text{arc sec } 5x^3$

$$\frac{15x^2}{5x^2\sqrt{5x^3-1}}$$

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

8. $y = \text{arc sen } 2x^4$

$$\frac{8x^3}{1-2x^4}$$

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

8x⁶

9. $y' = \arctan 2x^2$

$$\frac{14x^6}{1+2x^2}$$

$$\frac{U'}{1+U^2}$$

10. $y' = \operatorname{arccsc} 3x^2$

$$\frac{-U'}{U\sqrt{U^2-1}}$$

$$\frac{-6x}{6x\sqrt{3x^2-1}}$$