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Nombre del trabajo: "TAREA"

PASIÓN POR EDUCAR

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Grupo: A

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$$\bullet F(x) = \frac{d(\operatorname{arccosec} u)}{dx} = \frac{x}{x\sqrt{x^2-1}} = \frac{1}{\sqrt{x^2-1}}$$

$$\bullet F(x) = \operatorname{arccosec} 5x$$

$$\frac{d(\operatorname{arccosec} 5u)}{dx} = \frac{5}{5\sqrt{(5x)^2-1}} = \frac{5}{5\sqrt{25x^2-1}} = \frac{1}{\sqrt{25x^2-1}}$$

$$\bullet F(x) = \operatorname{arccosec} 7x$$

$$\frac{d(\operatorname{arccosec} 7u)}{dx} = \frac{7}{7\sqrt{(7x)^2-1}} = \frac{7}{7\sqrt{49x^2-1}} = \frac{1}{\sqrt{49x^2-1}}$$

$$\bullet F(x) = \operatorname{arccosec} x^4$$

$$d(\operatorname{arccosec} x^4) = \frac{4x^3}{4x^3\sqrt{(x^4)^2-1}} = \frac{4x^3}{4x^3\sqrt{x^8-1}} = \frac{1}{\sqrt{x^8-1}}$$

$$\bullet F(x) = \operatorname{arccosec} 2x^7$$

$$\frac{d(\operatorname{arccosec} 2u^7)}{dx} = \frac{128x^6}{128x^6\sqrt{(2x^7)^2-1}} = \frac{128x^6}{128x^6\sqrt{4x^{14}-1}} = \frac{1}{\sqrt{4x^{14}-1}}$$

$$\bullet F(x) = \operatorname{arccosec} 6x^6$$

$$\frac{d(\operatorname{arccosec} 6u^6)}{dx} = \frac{46,656x^5}{46,656x^5\sqrt{(6x^6)^2-1}} = \frac{46,656x^5}{46,656x^5\sqrt{36x^{12}-1}} = \frac{1}{\sqrt{36x^{12}-1}}$$

$$\bullet f(x) = \operatorname{arccosec} \frac{3x^4}{7}$$

$$d\left(\operatorname{arccosec} \frac{3u^4}{7}\right) = \frac{\frac{12x^3}{7}}{\frac{12x^3}{7}\sqrt{\left(\frac{3x^4}{7}\right)^2-1}} = \frac{\frac{12x^3}{7}}{\frac{12x^3}{7}\sqrt{\frac{9x^8}{49}-1}} = \frac{1}{\sqrt{\frac{9x^8}{49}-1}}$$

$$= \frac{1}{\sqrt{\frac{9x^8-49}{49}}}$$