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**Nombre del trabajo: biomatemáticas:
Cálculo Materia: Biomatemáticas I**

Grado: 2do MEDICINA HUMANA

EJERCICIOS

Deriva la función

$$f(x) = -82x^{-17}$$

$$1 \quad \frac{d}{dx} (-82x^{-17}) = 1394x^{-18}$$

$$2 \quad \frac{d}{dx} x^n = nx^{n-1} = \frac{d}{dx} (x^{\frac{-5}{6}}) = \frac{-5}{6} x^{\frac{-11}{6}}$$

$$3 \quad \frac{d}{dx} x^n = nx^{n-1} = \frac{d}{dx} (x^{-19}) = -19x^{-20}$$

$$4 \quad \frac{d}{dx} x^n = nx^{n-1} = \frac{d}{dx} (x^{\frac{3}{8}}) = \frac{3}{8} x^{\frac{-5}{8}}$$

$$5 \quad \frac{d}{dx} x^n = nx^{n-1} = f(x) = x^{\frac{5}{2}} = \frac{5}{2} x^{\frac{3}{2}}$$

$$6 \quad \frac{d}{dx} (x^{25}) = 25x^{24}$$

$$7 \frac{d}{dx} cx^n = cnx^{n-1} = \frac{d}{dx} (-33x^{-22}) = 726x^{-23}$$

$$8 \frac{d}{dx} x^n = nx^{n-1} = \frac{d}{dx} (x^{\frac{3}{4}}) = \frac{3}{4} x^{-\frac{1}{4}}$$

$$9 \frac{d}{dx} cx^n = cnx^{n-1} = f(x) = 9x^{-\frac{2}{9}} = \frac{-2}{9} x^{-\frac{11}{9}}$$
$$= \frac{-2}{9} \cdot \frac{-11}{9} x^{-\frac{11}{9}}$$
$$= \frac{22}{81} x^{-\frac{11}{9}}$$

$$10 \frac{d}{dx} c = 0 = f(x) = 39 = \underline{0}$$

$$11 \frac{d}{dx} c = 0 = f(x) = 62 = \underline{0}$$

$$12 \frac{d}{dx} (x-c) = f(x) = -9x = \underline{-9}$$

$$13 \frac{d}{dx} (x-c) = f(x) = -31x = \underline{-31}$$

$$14 \frac{d}{dx} c = \frac{d}{dx} (-78) = 0$$

$$15 \frac{d}{dx} (x-c) \frac{d}{dx} = 16 = \underline{16}$$

$$16 \frac{d}{dx} 6x = C \frac{d}{dx} 6x - 4 = -4$$

$$17 \frac{d}{dx} 64x = C \frac{d}{dx} 64x - 64 = -64$$