Esercizio 13

$$f(x) = \begin{cases} kx^3 & \text{or } x < 2 & \text{helk} \\ 0 & \text{othere} \end{cases}$$

$$K = \int_{-\infty}^{+\infty} F(x) dx = 1$$

$$K = \begin{cases} x \\ 0 \end{cases} dx = ,$$

$$= \kappa \int_{0}^{2} x^{3} dx$$

$$=4\left\{\frac{2^{\frac{9}{9}}}{9}-C\right\}$$

$$F_{x} = \int_{0}^{x} x^{3} x \, dx$$

$$= \frac{1}{9} \left[\frac{x^{9}}{9} \right]_{0}^{3}$$

$$F_{n}(x) = \begin{cases} 0 & x < 0 \\ \frac{n^{n}}{16} & 0 < x < 2 \\ 1 & 2 > 2 \end{cases}$$

Esercizi Blocco 2[2

MeniA

$$\frac{F(x)}{\int_{-\infty}^{+\infty}} F(x) \cdot x \, dx$$

$$= \int_{0}^{+\infty} K \cdot x^{2} \cdot x \, dx$$

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$$=\frac{1}{9}\left[\frac{\times S}{S}\right]G$$

$$=\frac{1}{9}\left(\frac{32}{5}-0\right)$$

$$=\frac{1}{9}\left(\frac{32}{5}\right)$$

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$$\left(\frac{1}{2},\frac{8}{5}\right)$$

$$= \int_{0}^{\infty} x^{3} + 2e^{2}$$

$$=\frac{1}{9}\left\{\frac{\varkappa^{6}}{6}\right\}^{2}$$

$$= \frac{1}{9} \left[\frac{69}{6} - 0 \right]$$

$$= \frac{1}{9} \left(\frac{69}{6} \right)$$

$$=\frac{1}{4}\left(\frac{64}{6}\right)$$

$$= 1 \cdot \frac{188}{83}$$
 $= 1 \cdot \frac{8}{3}$

$$= 1 - \frac{8}{3}$$

JARIAN ZA

$$V_{A}(x) = \frac{8}{3} - \left(\frac{8}{5}\right)^{2}$$

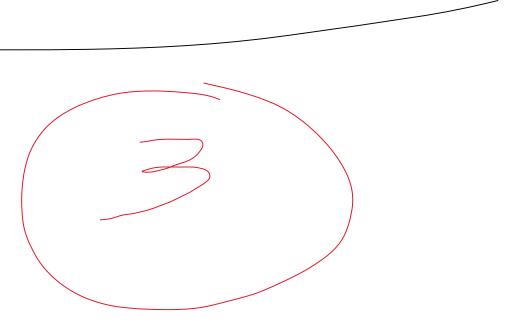
$$= \frac{8}{3} - \frac{64}{25}$$

$$F_{\gamma} = P(\gamma \leq y)$$

$$= y = P(x = y) = P(x = y^2)$$

$$F_{y} = P(y \leq y)$$

$$= y = P(x \leq y) = P(x \leq y^{\frac{1}{2}}) = \frac{y^{\frac{1}{2}}}{16} = \frac{y^{\frac{1}{2}}}{16}$$



$$F_{y}(y) = \begin{cases} \frac{y}{16} & \frac{y}{16} \\ \frac{y}{16} & \frac{y}{16} \\ \frac{y}{16} & \frac{y}{16} \end{cases}$$

$$f(y) = \frac{d}{d(y)} + y$$

$$= \frac{4}{16} = \frac{1}{16}$$

$$f(y)$$
 $\begin{cases} \frac{y}{8} \end{cases}$

OF Y = 2