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CONSIDERIAMO LA FUNZIONE INTEGRALE

$$\int_0^2 (g(x) \cdot f(x)) h(x) dx =$$

$$= 6x^2 - \frac{4x^3}{3} - \frac{3x^4}{4} + \frac{x^5}{5} \Big|_0^2 + \int_0^2 g(x) h(x) dx^*$$

$$= 6x^2 - 4 \frac{x^3}{3} - \frac{3x^4}{4} + \frac{x^5}{5} - \frac{3 \cos \pi x}{\pi} + \frac{x \cos \pi x}{\pi} +$$

$$- \frac{\sin \pi x}{\pi^2} \Big|_0^2 =$$

$$= \frac{116}{15} + \frac{2}{\pi}$$

* PER PARTI

$$g(x) = u'$$

$$h(x) = v$$

$$\int uv' = uv - \int uv'$$