calcolare $\int \left(\frac{x^3}{4-2x^4} + \frac{x^3}{(4-2x^4)^3} \right) dx$

$= \int \frac{x^3}{4-2x^4} dx + \int \frac{x^3}{(4-2x^4)^3} dx =$

$-\frac{1}{8} \int \frac{-8x^3}{4-2x^4} dx - \frac{1}{8} \int 8x^3 (4-2x^4)^{-3} dx =$

$= -\frac{1}{8} \ln|4-2x^4| - \frac{1}{8} \frac{(4-2x^4)^{-2}}{-2} + c \quad = -\frac{1}{8} \left(\ln|4-2x^4| + \frac{1}{2(4-2x^4)^2} \right) +$

$\int \left((2x-9)^2 + x(1+x^2)^3 \right) dx$

$= \int (2x-9)^2 dx + \int x(1+x^2)^3 dx = \frac{1}{2} \int 2(2x-9)^2 dx +$

$\frac{1}{2} \int 2x(1+x^2)^3 dx = \frac{1}{2} \frac{(2x-9)^3}{3} + \frac{1}{2} \frac{(1+x^2)^4}{4} + c =$

$= \frac{1}{6}(2x-9)^3 + \frac{1}{8}(1+x^2)^4 + c.$