

Answer to question # 50940

Integrate with respect to x :

$$\int (1 - 36x^2 - 5x + 2)dx$$

Solution

$$\begin{aligned}\int (1 - 36x^2 - 5x + 2)dx &= \int (3 - 36x^2 - 5x)dx = \int 3dx - 36 \int x^2 dx - 5 \int x dx \\ &= 3x - 36 \frac{x^3}{3} - 5 \frac{x^2}{2} + C = 3x - 12x^3 - \frac{5}{2}x^2 + C\end{aligned}$$

Answer: $3x - 12x^3 - \frac{5}{2}x^2 + C$