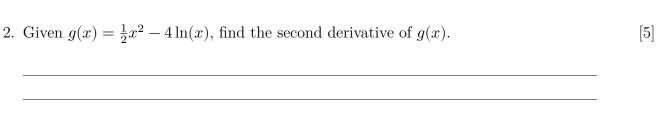
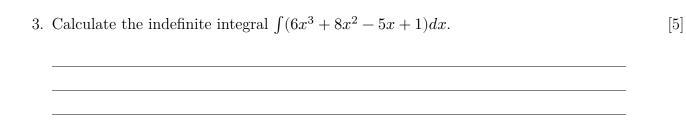
json -> latex convert test

kora

Questions

1.	Find the derivative of the function $f(x) = x^3 - 4x^2 + 5x - 7$.	[5]
		
		<u></u>
		f1





4. Find the area under the curve
$$y = 2x^3 - x^2 + 4x - 1$$
 from $x = 0$ to $x = 2$.

[5]

5. Determine the critical points of
$$h(x) = x^4 - 8x^2 + 10$$
 and classify them as local [5]

maxima, minima, or neither.
Evaluate the integral $\int_1^4 \frac{x^3 + 2x - 5}{x^2} dx$.
Given $f(x) = e^{2x}(3x^2 + x)$, find the derivative of $f(x)$. Simplify your answer.
Find the equation of the tangent line to the curve $y = \sin(x) - x\cos(x)$ at $x = 0$.
Calculate the volume of a solid formed by rotating the area between $y=x^2,y=4-x^2$ about the y-axis.
Given a function $f(x) = \sqrt{x} + \frac{4}{x^3}$, find its derivative and evaluate it at $x = 1$.