

7. [7 points] Use the partial fraction decomposition

$$\frac{x^2 + 11x - 6}{(2 - x)(x^2 + 1)} = \frac{4}{2 - x} + \frac{3x - 5}{x^2 + 1}$$

to evaluate the following indefinite integral, showing all of your work.

$$\int \frac{x^2 + 11x - 6}{(2 - x)(x^2 + 1)} dx$$

Answer: _____