Decision:

1. The fraction is irregular, so we represent it as a sum of a polynomial and a regular fraction, dividing the numerator by a denominator.

Subintegral function takes the form:

$$f(x) = \underbrace{(x-2)}_{f_1(x)} + \underbrace{\frac{4x^3+4x^2+4x+4}{x^4+2x^3+2x^2}}_{f_2(x)}$$

2. Decompose the denominator of a regular rational fraction to prime factors.