

Name:

Section: 5 6 9 10

1. Write the abstract partial fraction decomposition for

$$\frac{x^3 - 8x^2 - 17x + 10}{x^3(x^2 + 1)^2(x - 2)}$$

2. Solve the integral $\int x^3 \sqrt{1 - x^2} dx$ using a trigonometric substitution.