## Math-19 Homework #5

1. Determine the domain. Express your answer in interval notation and in graph form:

$$\frac{x^{-\frac{1}{2}}\sqrt[4]{4+3x-x^2}}{\sqrt[3]{x^2-3x+2}\sqrt{(x+2)(3-x)}}$$

2. Solve for *x*:

$$\frac{x^2 - 7x - 18}{x^2 - 6x - 27} < \frac{x^2 - 1}{x^2 - x - 2}$$

- 3. Section 1.8 Problem 88
- 4. Section 1.8 Problem 90
- 5. Section 1.8 Problem 120