All work must be shown in this course for full credit. Unsupported answers may receive NO credit.

- 1. *Explain* how to FIND an inverse of a given function algebraically.
- 2. *Explain* how to VERIFY two functions are inverses of each other.

3. Let  $f(x) = 1 - \ln(x - 2)$ .

- a) What is the domain of f?
- b) What is the range of f?
- c) What are the *x*-intercepts of the graph of f?

d) Find  $f^{-1}$ .

e) Verify your answer to part *d*.

4. Complete the following questions from the textbook: p44 #13, 15, 18, 23, 33, 34, 37 – 42, 46, 48, 49, 54, 55, and 57