## Math-08 Homework #7

## Reading

• Text book section 1.5

## **Problems**

1). Solve for x (Hint: quadratic-like?)

$$x + 2\sqrt{x} - 15 = 0$$

2). Solve for x (Hint: there should be only two solutions, not four)

$$2|2x+3|-6=3|x|+1$$

3). Solve for x

a). 
$$(x+1)^{\frac{2}{3}}=9$$

b). 
$$(x+1)^{\frac{2}{3}} = -9$$

c). 
$$(x+1)^{\frac{3}{2}} = 27$$

d). 
$$(x+1)^{\frac{3}{2}} = -27$$

- 4). Consider  $x^4 81 = 0$ 
  - a). Solve for x
  - b). This is a degree-4 polynomial, so there is a maximum of four possible solutions. You should have found only two. Why are there only two?