**Algebra II First Semester Final Review**

Chapter 1

 Page 50: #15, 19, 35 – 51 odd (skip #43)

Chapter 2

 Page 123 #11 – 27 (skip #17), 31 – 39 odd, 55 – 61 odd

Chapter 3

 Page 207 #11 – 23 odd (skip #15), 29

Chapter 4

 Page 291 #9 – 21 odd (skip #19), 27, 31 – 61 odd, 65 – 73 odd

Chapter 5

 Page 337 #58 – 60 all

Page 374 #11 – 27 odd (skip #21), 35 – 55 odd

Notes:

 All odd problem answers are in the back of the book.

 Page 337

#58: Since the end behavior is in the same direction, it is an even-degree function. The graph intersects the *x*-axis at two points, so there are two real zeros. $f\left(x\right)\rightarrow +\infty as x\rightarrow -\infty , f\left(x\right)\rightarrow +\infty as x\rightarrow +\infty $.

#60: Since the end behavior is in the same direction, it is an even-degree function. The graph intersects the *x*-axis at four points, so there are four real zeros. $f\left(x\right)\rightarrow +\infty as x\rightarrow -\infty , f\left(x\right)\rightarrow +\infty as x\rightarrow +\infty .$