## Algebra II Homework:

Chapter 1, Section 1: "Parent Functions and Transformation" --- Pages 8 - 10
Textbook Problems:
Part I: $1,6,7,8,9,10,11,12,13,14,15,16,18,37,38,47,52$
Part II: 3, 4, 5, 19, 20, 21, 22, 23, 24, 25, 26, 39, 40, 41, 42, 43, 44, 51
Chapter 1, Section 2: "Transformations of Linear and Absolute Value Functions" --Pages 16-18
Textbook Problems:
Part I: 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 23, 24, 31, 32, 37, 38
Part II: 17, 18, 19, 20
Chapter 1, Section 3: "Modeling with Linear Functions" --- Pages 26-28
Textbook Problems:
Part I: $1,3,4,5,7,8,10$
Part II: 9, 13, 14, 15, 18

## Extra Problems:

1. At the end of 2 hours, a petri dish has 100 bacteria in it. At the end of 7 hours, the number has grown to 145 bacteria.
Write a linear equation which gives the number of bacteria as a function of time/hours. Identify the variables.
2. Michael lights a 10 inch tall candle. At the end of 4 hours, the candle is 8 inches tall.
Write a linear function which gives the height of the candle as a function of time/hours. Identify the variables

Chapter 1, Section 4: "Solving Linear Systems" --- Pages 34-35
Textbook Problems: 3, 7, 12, 13, 14, 15, 22, 23, 24, 33

