## Chapter 6: Polynomials and Polynomial Functions

In this chapter, you will:

- classify polynomial functions
- graph polynomials in factored form (zeros)
- solve polynomial equations
- factor polynomials
- divide polynomials
- solve equations using theorems about roots
- explore polynomial graphs using a graphing calculator (end behavior, multiplicity, max, min, zeros)
- use the Fundamental Theorem of Algebra in solving polynomial equations with complex roots

Tentative problems, quizzes, tests, and activities for this chapter:

| Section $/$ <br> Chapter | Type of <br> assignment | Pages (as <br> applies) | Problems |
| :---: | :---: | :---: | :--- |
| $6-1$ | Homework | $309-310$ | $1,5,8,12,33,35,36,41-44,51,55$, <br> $\mathbf{6 2 - 6 7}$ |
| $6-2$ | Homework | $317-319$ | $2,5,7,9,10,11,13,14,16,18,20-24,32-36$, <br> $43,52,66,67$ |
| $6-3$ | Homework | $324-326$ | $3,5,7,14,16,18,19,21,26,28,30,42,43,64,71$ |
| $6-4$ | Homework | $330-332$ | $1,2,6,12-14,21,23,25,27,28,29,30,45-49$ |
| $6-5$ | Homework | $339-340$ | $1-9$ (odd), 10, 11, 143, 14, 16, 19, 20, 22, 26, 27 |
| $6-6$ | Homework | $343-344$ | $2,4,6,8-12,14,15,21-24$ |
| Ch. 6 | Review | N/A | Review Worksheet |
| Ch. 6 | Test | N/A | N/A |

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