

## Chapter 5: Quadratic Equations and Functions

In this chapter, you will:

- factor quadratic expressions
- solve quadratics by factoring
- identify complex numbers
- add, subtract, multiply, and divide complex numbers
- solve quadratic equations using square roots
- solve quadratic equations by completing the square
- rewrite equations in vertex form
- solve quadratic equations using the quadratic formula
- identify characteristics of quadratic functions and graphs
- graph quadratics in standard form
- find and apply maximum and minimum values of quadratic functions
- graph quadratics in vertex form (transformations)

Tentative problems, tests, and activities for this chapter:

Section / Chapter	Type of assignment	Pages (as applies)	Problems
5-1 5-3	Homework	241 – 243 255 – 258	5, 6, 8, 10, 12, 21, 28, 29, 46, 47 <b>Graph. Plot 5 points. Identify axis of symmetry and y-intercept.</b> 2, 3, 5, 9, 12, 13, 14, 16, 19, 25, 42, 44
5-2	Homework	248 – 249	2, 3, 10, 11, 15, 17, 28 – 30, 42, 54, 55
5-4	Homework	263 – 264	2, 3, 6, 10, 15, 19, 21, 24, 27, 30, 32 – 44(even), 47, 53, 57, 60, 62
5-5	Homework	270 – 272	1 – 19 (odd), 24, 26, 28, 33, 37 – 45 (odd), 46, 51, 65, 78, 80
5-6	Homework	278 – 279	2 – 18 (even), 30 – 46 (even), 43, 51, 52, 58 – 64 (even)
5-7	Homework	285 – 287	2 – 36 (even), 37, 39, 70
5-8	Homework	293 – 295	2, 3, 7, 20, 24, 26, 28, 29, 31 – 33, 41 – 51, 58 – 60
Ch. 5	Review	299-301	9, 13, 15, 16, 19, 22, 24 – 30, 34, 37, 47, 48, 57, 58, 61, 63, 70, 71
Ch. 5	Test	N/A	N/A