### **Student Text Pages**

142 to 143

## **Suggested Timing**

30–45 min

#### Tools

- grid paper
- graphing calculator
- computer algebra system

#### Related Resources

- G–1 Grid Paper
- T-4 The Computer Algebra System (CAS) on the TI-89 Calculator
- BLM 2–11 Chapter 2 Test

#### Summative Assessment

 You may wish to use
BLM 2–11 Chapter 2 Test as a summative assessment.

# **Study Guide**

Use the following study guide to direct students who have difficulty with specific questions to appropriate examples to review.

Question	Section(s)	Refer to
1	2.1	Example 1 (page 85), Example 4 (page 89)
2	2.2	Example 1 (pages 95–96)
3	2.2	Example 2 (pages 97–98)
4	2.1	Example 2 (page 86)
5	2.1	Example 5 (page 90)
6	2.2	Example 2 (pages 97–98), Example 3 (page 99)
7	2.3	Investigate (page 104)
8	2.3	Example 1 (page 105)
9	2.3	Example 2 (pages 105–106)
10a)	2.5	Key Concepts (page 129)
10b)	2.3	Investigate (page 104)
11	2.4	Example 3 (page 117)
12	2.4	Example 4 (pages 117–118)
13	2.3	Example 3 (pages 107–108)
14	2.5	Example 1 (page 126)
15	2.5	Example 3 (page 128)
16	2.6	Example 2 (pages 133–137)
17	2.6	Example 3 (pages 137–138)

Can students do each of the following?

- Apply the remainder theorem to determine the remainder when a polynomial is divided by a binomial
- Apply the factor theorem to factor polynomials in one variable of degree greater than two
- Determine the equation of a family of polynomial functions that satisfy given conditions
- Solve polynomial equations using a variety of strategies
- Describe the connection between the real roots of a polynomial equation and the *x*-intercepts of the graph of the corresponding function
- Solve linear and factorable polynomial inequalities and represent the solutions on a number line
- Explain the difference between the solution to a polynomial equation and a polynomial inequality
- Solve polynomial inequalities algebraically and using technology