

Chapter 5 Practice Test

Student Text Pages

258–259

Suggested Timing

70 min

Tools

- algebra tiles

Technology Tools

- TI-89 calculator

Related Resources

- BLM 5–13 Chapter 5 Practice Test
- BLM 5–14 Chapter 5 Test
- BLM 5–15 Chapter 5 Practice Test Achievement Check Rubric

Accommodations

Gifted and Enrichment—Challenge students to create an extra Practice Test for their classmates.

Motor—Let students work with a partner when answering the questions in the Chapter Review.

Language—Allow students to give oral responses to the Chapter Review questions.

ESL—Give students extra time to complete the Chapter Review and Practice Test.

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	5.1	Example 1 (page 214)
2	5.1	Investigate B (pages 212–213), Example 3 (page 216)
3	5.1/5.2	Example 2 (page 215), Example 3 (page 216)/Example 1 (page 224)
4	5.2	Example 1 (page 224)
5	5.3	Example 2 (pages 231–232), Example 3 (page 232), Example 4 (page 233)
6	5.2/5.5	Example 2 (page 224)/Example 3 (page 245)
7	5.4/5.6	Example 1 (pages 238–239)/Example 1 (page 251), Example 2 (page 251)
8	5.5/5.6	Example 1 (pages 243–244), Example 2 (page 244)/Example 1 (page 251), Example 3 (page 252)
9	5.5	Example 1 (pages 243–244)
10	5.4	Example 2 (pages 239–240)
11	5.6	Investigate B (pages 249–250), Example 3 (page 252)
12	5.6	Example 4 (pages 252–253)
13	5.2/5.5	Example 2 (page 224)/Example 3 (page 245)
14	5.5/5.6	Example 3 (page 245)/Example 3 (page 252)
15	5.6	Investigate A (pages 248–249), Example 1 (page 251)
16	5.6	Example 1 (page 251)
17	5.5	Example 1 (pages 243–244)
18	5.4/5.5/5.6	Example 1 (pages 238–239)/Example 1 (pages 243–244)/Example 4 (pages 252–253)

Using the Practice Test

This Practice Test can be assigned as an in-class or take-home assignment. If it is used as an assessment, use the following guidelines to help you evaluate the students.

Can students do each of the following?

- Multiply polynomials
- Expand special products
- Determine common factors
- Factor a trinomial of the form $x^2 + bx + c$
- Factor a trinomial of the form $ax^2 + bx + c$
- Factor perfect squares
- Factor a difference of squares
- Solve applications
- Communicate their understanding
- Apply their skills to problem solving situations

Summative Assessment

- After students complete **BLM 5–13 Chapter 5 Practice Test**, use **BLM 5–14 Chapter 5 Test** as a summative assessment.

Achievement Check Sample Solution, question 18, page 259

Provide students with **BLM 5–15 Chapter 5 Practice Test Achievement Check Rubric** to help them understand what is expected.

- 18. a)** To factor this trinomial, you need two integers that have a product of 10 and a sum of b .

Factors of 10	Product	Sum
1, 10	10	11
-1, -10	10	-11
2, 5	10	7
-2, -5	10	-7

The possible values for b are 7, -7, 11, and -11.

- b)** To factor this trinomial, you need two integers that have a product of 4×5 , or 20, and a sum of b .

Factors of 20	Product	Sum
1, 20	20	21
-1, -20	20	-21
2, 10	20	12
-2, -10	20	-12
4, 5	20	9
-4, -5	20	-9

The possible values for b are 9, -9, 12, -12, 21, and -21.

Some students may show the actual factors for each case, but this is not necessary.

- c)** Area = $(x + 1)(x + 2) - 4(3)$

Expand, simplify, and then factor.

$$\begin{aligned}(x + 1)(x + 2) - 4(3) \\ &= x^2 + 3x + 2 - 12 \\ &= x^2 + 3x - 10 \\ &= (x + 5)(x - 2)\end{aligned}$$