

Chapter 8 Practice Test

Student Text Pages

432–433

Suggested Timing

80 min

Tools

- ruler
- protractor

Related Resources

- BLM 8–13 Chapter 8 Practice Test
- BLM 8–14 Chapter 8 Test
- BLM 8–15 Chapter 8 Practice Test Achievement Check Rubric

Accommodations

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

Motor—Let students do fewer review questions.

Memory—Allow students to use a formula sheet when working through the questions in this Chapter Review, the Practice Test, and the Chapter 8 Test.

ESL—Provide students with extra time to complete the review questions and the Practice Test.

Study Guide

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

Question	Section(s)	Refer to
1	8.1	Example 1 (page 398)
2	8.2	Example 1 (page 407)
3	8.1	Example 2 (page 399)
4	8.3	Example 1a) (pages 413–415)
5	8.2	Example 2 (page 408)
6	8.3	Example 1a) (pages 413–415)
7	8.2	Example 2 (page 408)
8	8.1	Example 3 (page 400)
9	8.4	Example 1 (pages 424–425)
10	8.4	Example 2 (page 426)
11	8.1	Example 1 (page 398)
12	8.2	Example 1 (page 407)
13	8.2/8.4	Example 1 (page 407)/Example 1 (pages 424–425)
14	8.1/8.4	Example 1 (page 398)/Example 1 (pages 424–425)
15	8.1/8.4	Example 1 (page 398)/Example 1 (pages 424–425)
16	8.1/8.2/8.3	Example 3 (page 400)/Example 2 (page 408)/Example 2 (pages 415–416)

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?

- Apply the sine law to solve for an unknown side length
- Apply the sine law to solve for an unknown angle
- Use the sine law to solve a triangle
- Apply the cosine law to solve for an unknown side length
- Apply the cosine law to solve for an unknown angle
- Use the cosine law in conjunction with other trigonometric tools to solve a triangle
- Apply the sine law and cosine law in conjunction with other trigonometric and geometric tools to solve problems

Summative Assessment

- After students complete **BLM 8–13 Chapter 8 Practice Test**, use **BLM 8–14 Chapter 8 Test** as a summative assessment.

Achievement Check Sample Solution, question 16, page 433

Provide students with **BLM 8–15 Chapter 8 Practice Test Achievement Check Rubric** to help them understand what is expected.

16. a) The possible measurements are the three side lengths and the three angle measures. Some students may add perimeter and area but these are calculated measures.

b), c) Answers will vary. For example: You need at least three measurements including one side in order to solve the triangle. The remaining three measures can be calculated using the sine and cosine laws.

Choice 1: Measure one side and the two contained angles if the lengths of the sides are difficult to measure (i.e., you want to restrict the number of side measurements). You would need to position yourself at two of the vertices to make these measurements.

Choice 2: Another possibility is to measure two sides and the contained angle, but this requires you to travel to all three vertices to make these measurements with conventional tools. If you are able to measure distance with a laser tool, then this becomes the preferred alternative, since all measurements can be made from one point.

For calculations, choice 1 involves using the sine law twice, while choice 2 involves using the cosine law first and then the sine law. Choice 1 is computationally simpler.