

## SESSION 1

This session contains 30 multiple-choice questions. Fill in the circle for your answer to each multiple-choice question.



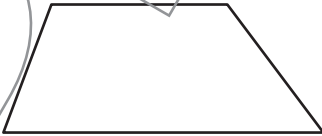

You may use a protractor and a ruler during this session. You may **not** use a calculator during this session.

SAMPLE

**20** The length of a jewelry case is 8 inches. The height is 12 inches, and the width is 6 inches. What is the volume, in cubic inches, of the jewelry case?

- (A) 26 cubic inches
- (B) 90 cubic inches
- (C) 566 cubic inches
- (D) 576 cubic inches

**21** A quadrilateral is a polygon with four sides. A rhombus is a quadrilateral with two sets of parallel sides and four congruent sides. Which of the following is both a quadrilateral and a rhombus?

- (A) 
- (B) 
- (C) 
- (D) 

**22** Three friends are going on a road trip of 2,468 miles. If each person drives the same distance, how far will each person drive?

- (A) 822 miles
- (B)  $822\frac{2}{3}$  miles
- (C) 824 miles
- (D)  $824\frac{1}{2}$  miles

## SESSION 2

This session contains eight multiple-choice questions, six short constructed-response items, and one extended constructed-response item. Fill in the circle for your answer to each multiple-choice question. Write your answers for the constructed-response items in the spaces provided.

You may use a protractor and a ruler during this session. You may **not** use a calculator during this session.

SAMPLE

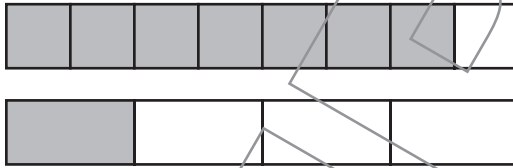
**Directions:** Read each problem. Then fill in the circle of the best answer.

- 31** Which of the following describes the expression below?

$$3 + (9 \times 4)$$

- (A) Multiply 3 and 9, then multiply by 4.
- (B) Add 3 and 9, then multiply by 4.
- (C) Multiply 9 and 4, then add 3.
- (D) Add 3, 9, and 4.

- 32** Krys has a  $\frac{7}{8}$ -foot piece of wood and a  $\frac{1}{4}$ -foot piece of wood. He drew the fraction models below to represent these pieces.



He says he has a total of  $\frac{7}{8} + \frac{1}{4} = \frac{8}{12} = \frac{2}{3}$  foot of wood. He drew the model below to represent this fraction.



Which sentence best explains why Krys is incorrect?

- (A) The model is greater than  $\frac{1}{4}$  but less than  $\frac{7}{8}$ , and it should show a fraction greater than 1.
- (B) The model is less than  $\frac{1}{4}$  but greater than  $\frac{7}{8}$ , and it should show a fraction greater than 1.
- (C) The model is equal to  $\frac{1}{4}$ , and it should show a fraction equal to 1.
- (D) The model is equal to  $\frac{7}{8}$ , and it should show a fraction equal to 1.

44

George is organizing a party in a banquet hall. He begins to draw the diagram below of the hall.



The dance floor represents  $\frac{1}{4}$  of the room. One-eighth of the room will be reserved for children.

**Part A:** Write an expression that represents the fraction of the room that is reserved for the dance floor and for children.

**Answer:** \_\_\_\_\_

**Part B:** Explain how you know your answer to Part A will be greater than, less than, or equal to  $\frac{1}{8}$ , without solving the expression. Solve the expression to show you are correct.

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Samantha spent 210 minutes running in the past 5 days.

**Part A:** If Samantha ran for the same amount of time each day, how many minutes did she run each day?

**Answer:** \_\_\_\_\_ minutes

**Part B:** Samantha runs a mile in 8.4 minutes. How many miles did she run each day?

**Answer:** \_\_\_\_\_ miles

On Saturday, Samantha ran 15 miles. She slowed her pace to a 9.8-minute mile so she could run a longer distance.

**Part C:** How many more minutes will it take Samantha to run 15 miles at the slower pace than if she could maintain her faster pace for this distance?

**Show your work.**

**Answer:** \_\_\_\_\_ minutes