
Introduction

INDIVIDUAL TESTS

The Standards Grades 7-8 MathBox contains pages of multiple-choice questions that correlate to the following NCTM Standards:

Standard 1	Mathematics as Problem Solving
Standard 2	Mathematics as Communication
Standard 3	Mathematics as Reasoning
Standard 4	Mathematical Connections
Standard 5	Number and Number Relationships
Standard 6	Number Systems and Number Theory
Standard 7	Computation and Estimation
Standard 8	Patterns and Functions
Standard 9	Algebra
Standard 10	Statistics
Standard 11	Probability
Standard 12	Geometry
Standard 13	Measurement

Answer keys for all questions are provided.

CUMULATIVE TESTS

The Standards Grades 7-8 MathBox includes four cumulative tests that are comprised of 13 questions, one from each standard. The level of difficulty is the same for all four tests. Teachers may wish to use these tests for pre and post testing or as a diagnostic tool. Answer keys provide solutions identified by a standard so that a teacher can determine where a student might need additional practice.

This MathBox can be used to:

- address the NCTM Standards
- review basic skills
- pinpoint areas of difficulty
- provide enrichment
- offer variety in homework or in-class assignments

Other titles available in this series are:

Standards 3-4 MathBox
Standards 5-6 MathBox
Standards 9-12 MathBox

The questions in this MathBox are a subset of the questions that are available in the Standards Level 2 TestBank.

Circle the letter of the correct answer.

1 Three girls purchase 90 cm of string to make necklaces and bracelets. Sara needs twice as much as Carol; Andrea needs three times as much as Carol. How much string does Carol need?

- A** 10 cm **B** 15 cm
C 30 cm **D** 45 cm

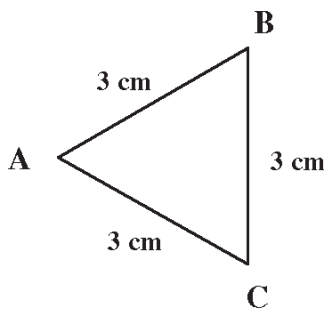
2 A bag of flour weighs 2 kilograms. Sally uses 1,200 grams baking. How many grams remain in the bag?

- A** 800 g **B** 1,198 g
C 1,202 g **D** 3,200 g

3 Tamika earns \$8.00 an hour doing yard work. She starts a lawn at 9:15 a.m. and finishes at 11:30 a.m. How much does Tamika earn?

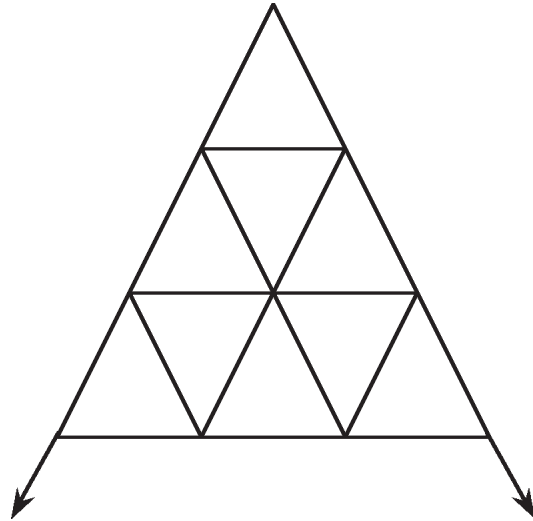
- A** \$18.00 **B** \$17.20
C \$16.00 **D** \$10.15

4 What does angle C measure?



- A** 30° **B** 45°
C 60° **D** 90°

5 Extend the pattern. How many triangles will be in the sixth row?



- A** 7 **B** 9
C 11 **D** 13

6 Which solid has a circular base?

- A** cylinder
B cube
C rectangular prism
D hexagonal prism

7 The perimeter of a square garden is 16 meters. Each side is increased by one meter. What is the area of the new garden?

- A** 16 m² **B** 17 m²
C 20 m² **D** 25 m²

Circle the letter of the correct answer.

32 Multiply. 374.06×5.92

- A** 2214.4352 **B** 2217.632
C 22176.32 **D** 221443.52

33 The Klein family rented a moving van that cost \$1.42 per mile. They drove it for 37.5 miles. What did they pay for renting the van?

- A** \$26.41 **B** \$38.92
C \$53.25 **D** \$532.50

34 Cathy sold hats for \$7.50 each at a craft show. If she sold 6 hats, how much money did she collect?

- A** \$0.45 **B** \$4.50
C \$45.00 **D** \$450.00

35 If colored pencils are \$1.49 a package, how much will 6 packages cost?

- A** \$2.94 **B** \$8.68
C \$8.94 **D** \$12.94

36 Bill wants to buy in-line skates that cost \$249. If he trades in his old skates for \$62, how much more money does Bill need?

- A** \$177 **B** \$187
C \$197 **D** \$227

37 $606 \times 51 =$

- A** 30,300 **B** 30,855
C 30,906 **D** 31,906

38 Miss Sullivan bought twelve bags of fun size candy bars. Each bag contained twenty-four candy bars. How many candy bars did she buy?

- A** 2 **B** 12
C 36 **D** 288

39 Find the quotient.

$$26 \overline{)3648}$$

- A** 14 R80 **B** 140 R0
C 140 R8 **D** 1400 R8

40 Round 5.618 to the NEAREST hundredth.

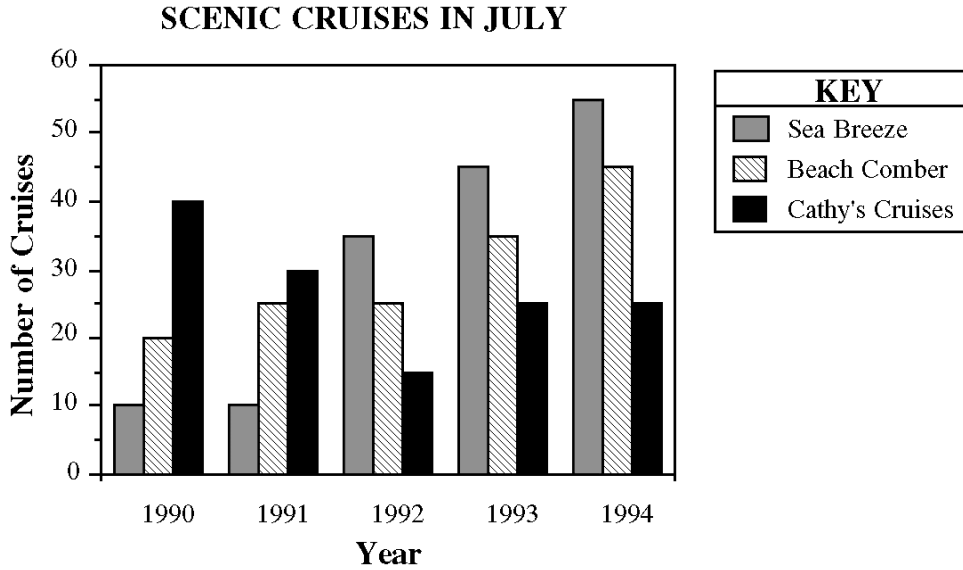
- A** 5.6 **B** 5.62
C 5.628 **D** 6

41 What is $42.3 \div 100$?

- A** 0.0423 **B** 0.423
C 4.23 **D** 423

Circle the letter of the correct answer.

20 Which statement is appropriate for this graph?



- A** The least number of cruises took place in 1991.
- B** Cathy's Cruises had the most number of cruises each year.
- C** The greatest number of cruises occurred in 1991.
- D** Beach Comber had the greatest number of cruises from 1990 and 1994.

21 In a class of 25, the median test score was 70%. Select the true statement.

- A** At least half the students received 69% or lower.
- B** More students received 70% than any other score.
- C** Less than one-half of the students received 70% or higher.
- D** There was an equal amount of scores above and below 70%.

22 Which pair of numbers, when included with this set, will change the mean but not the median?

{8, 7, 15, 23, 27}

- A** 17, 28 **B** 10, 22
- C** 4, 11 **D** 15, 30

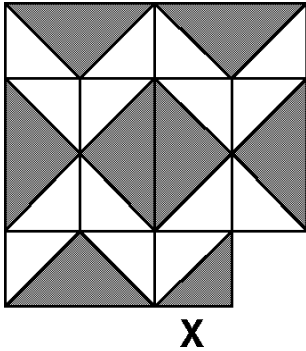
23 What is the mode of this data?

17, 20, 19, 36, 41, 11, 18, 8
19, 19, 38, 8, 26, 14, 12, 21

- A** 8 **B** 19
- C** 33 **D** 41

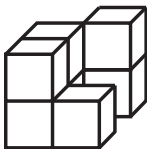
Circle the letter of the correct answer.

22 How must square X be transformed to complete this pattern?



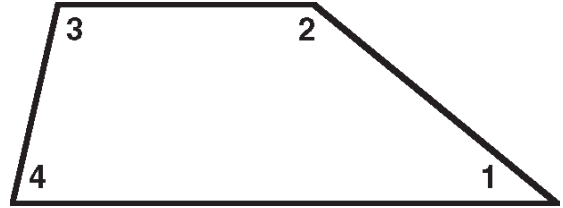
- A** reflection (flip)
- B** translation (slide)
- C** rotation of 180° (turn)
- D** size change

23 Which of these could NOT be a front, side, or top view of this figure?



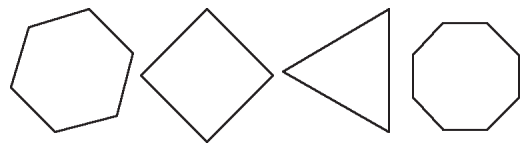
- A**
- B**
- C**
- D**

24 Which angle in this shape appears to be the smallest?



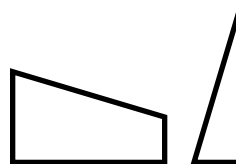
- A** angle 1
- B** angle 2
- C** angle 3
- D** angle 4

25 What do these shapes have in common?



- A** They are all parallelograms.
- B** They all have equal sides.
- C** They all have only one line of symmetry.
- D** They all have a right angle.

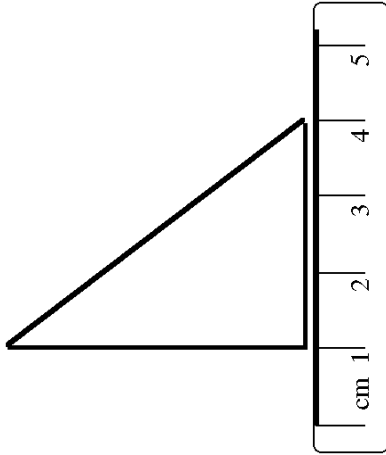
26 Which shape CANNOT be formed from these two?



- A** octagon
- B** parallelogram
- C** rectangle
- D** triangle

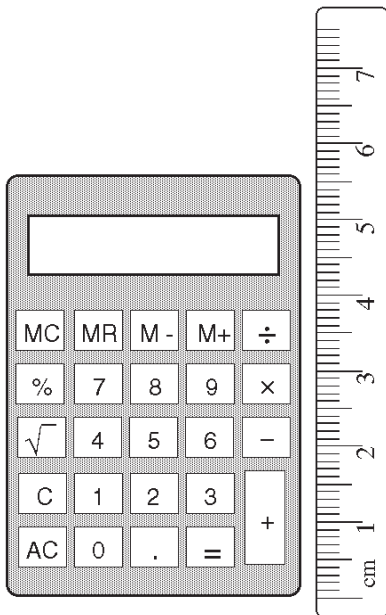
Circle the letter of the correct answer.

- 4 Measure the height of this triangle to the nearest millimeter.



- A** 3 mm **B** 4 mm
C 30 mm **D** 40 mm

- 5 What is the height of this calculator?



- A** 5.6 mm **B** 6.7 mm
C 56 mm **D** 67 mm

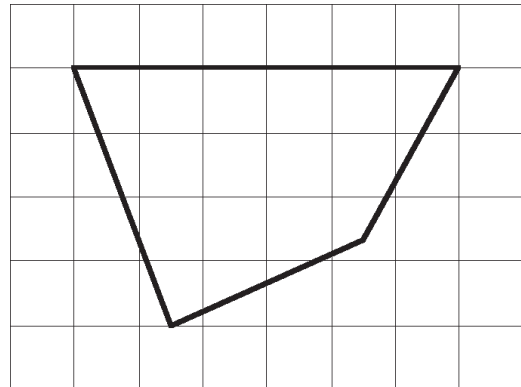
- 6 Select the APPROXIMATE height of an adult bicycle.

- A** 100 mm **B** 10 cm
C 1 m **D** 1 km

- 7 The length of a computer mouse is ABOUT

- A** 8 mm **B** 8 cm
C 8 m **D** 80 cm

- 8 Use this centimeter grid to estimate the area of this figure.



- A** 8 cm² **B** 14 cm²
C 20 cm² **D** 24 cm²

- 9 Find the area of a rectangle with a length of 14 cm and width of 6 cm.

- A** 20 cm **B** 40 cm
C 42 cm² **D** 84 cm²