

New York State Testing Program

Mathematics Book 1

Grade

5

Sample Test 2005

TIPS FOR TAKING THE SAMPLE TEST

Here are some suggestions to help you do your best:

- Be sure to read carefully all the directions in the test book.
- You may use your tools to help you solve any problem on the test.
- Read each question carefully and think about the answer before choosing your response.



This picture means that you will use your ruler.



This picture means that you will use your protractor.

Sample A

Samuel picked 150 strawberries at the strawberry patch. He gave away all the strawberries to 5 friends. If Samuel divided the strawberries equally, how many strawberries did each friend receive?

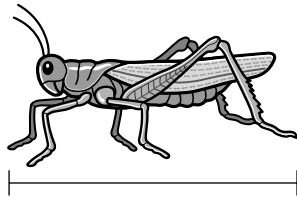
- A 30
- B 50
- C 145
- D 155

Sample B



Use your ruler to help you solve this problem.

Kathy caught a grasshopper like the one shown below.



What is the length, in inches, of the grasshopper?

- F 1
- G $1\frac{1}{2}$
- H 2
- J $2\frac{1}{2}$

STOP

1

Ellen bought 3 pints of orange juice. How many cups of orange juice did she buy?

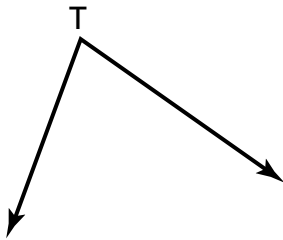
1 pint = 2 cups

- A** 2
- B** 6
- C** 12
- D** 18

2

Use your protractor to help you solve this problem.

Holly drew the angle below.



What is the measure of $\angle T$?

- F** 105°
- G** 100°
- H** 80°
- J** 75°

Go On

3

Mona swims a race in 28.872 seconds. What is her race time rounded to the nearest tenth of a second?

- A** 28.8
- B** 28.87
- C** 28.9
- D** 28.97

4

Which expression is true?

- F** $\frac{1}{2} > 0.2$
- G** $\frac{1}{2} > 0.5$
- H** $\frac{1}{5} > 0.2$
- J** $\frac{1}{5} > 0.5$

5

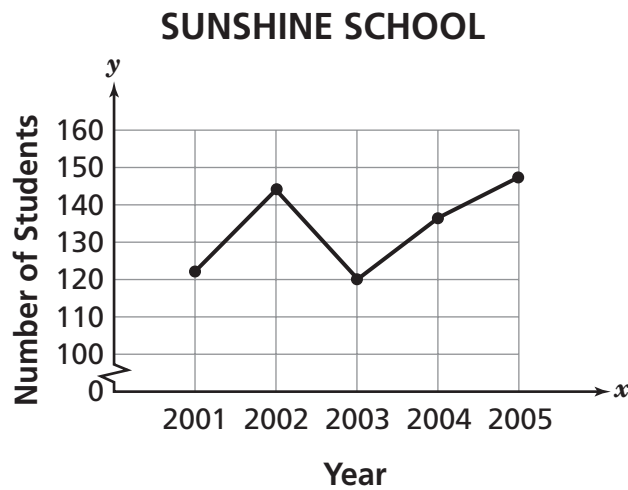
Stacie buys a rectangular placemat that is 10 inches wide and 16 inches long. What is the perimeter of the placemat?

$$\text{perimeter of rectangle} = (2 \times \text{length}) + (2 \times \text{width})$$

- A 26 inches
- B 36 inches
- C 42 inches
- D 52 inches

6

The line graph shows the number of students in the fifth grade at Sunshine School from 2001 to 2005.



In which year were the **least** number of students in the fifth grade at Sunshine School?

- F 2001
- G 2002
- H 2003
- J 2004

Go On

7

At Simon's Pet Store, 6% of the animals are lizards. What fraction of the animals are lizards?

- A** $\frac{1}{6}$
- B** $\frac{1}{60}$
- C** $\frac{6}{10}$
- D** $\frac{6}{100}$

8

Mr. Vincent asked students in a study group to write three correct degree measures for the interior angles of a triangle. Which list names correct degree measures for a triangle?

- F** $45^\circ, 45^\circ, 45^\circ$
- G** $45^\circ, 90^\circ, 45^\circ$
- H** $90^\circ, 45^\circ, 90^\circ$
- J** $90^\circ, 90^\circ, 90^\circ$

9

Four students simplify the expression below.

$$6 + 4 \times 5 \div 2$$

Aimee's solution is 25, Dario's solution is 46, Jimmy's solution is 13, and Lani's solution is 16. Who simplified the expression correctly?

- A** Aimee
- B** Dario
- C** Jimmy
- D** Lani

10

Which pattern follows the rule below?

Multiply by 6.

- F** 18, 36, 72, 144 . . .
- G** 14, 84, 504, 510 . . .
- H** 9, 54, 324, 972 . . .
- J** 3, 18, 108, 648 . . .

11


Which fraction belongs in the box to make the expression true?

$$\frac{1}{2} < \frac{7}{10} < \square$$

- A** $\frac{1}{4}$
- B** $\frac{2}{5}$
- C** $\frac{4}{5}$
- D** $\frac{6}{10}$

Go On

- 12** Pierre is making an apple crumb pie using the items below.

APPLE CRUMB PIE 	
Crumb	Filling
$\frac{3}{4}$ cup flour	4 cups sliced apples
$\frac{1}{3}$ cup sugar	$\frac{1}{3}$ cup sugar
$\frac{1}{4}$ cup butter	$\frac{1}{2}$ cup raisins

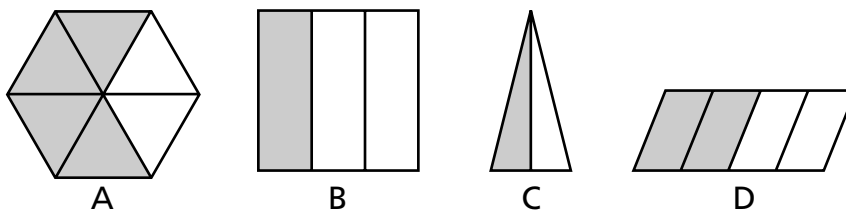
How much total sugar must Pierre use to make the pie crumb and filling?

- F** $\frac{7}{12}$ cup
- G** $\frac{2}{6}$ cup
- H** $\frac{3}{4}$ cup
- J** $\frac{2}{3}$ cup

- 13** Nora measured the angles of a triangle. Two of the angles measured 20° each. What was the measure of the third angle of Nora's triangle?

- A** 20°
- B** 50°
- C** 140°
- D** 180°

- 14** The figures below are divided into equal parts.



Which two figures are shaded to show equivalent fractions?

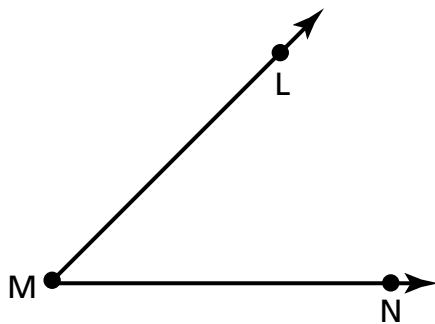
- F** Figure C and Figure D
- G** Figure B and Figure C
- H** Figure A and Figure D
- J** Figure A and Figure B

15



Use your protractor to help you solve this problem.

What is the measure of $\angle M$ in the figure below?

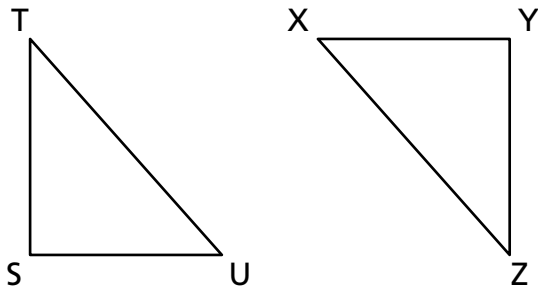


- A** 45°
- B** 55°
- C** 125°
- D** 135°

Go On

16

Triangle UST is congruent to triangle XYZ.

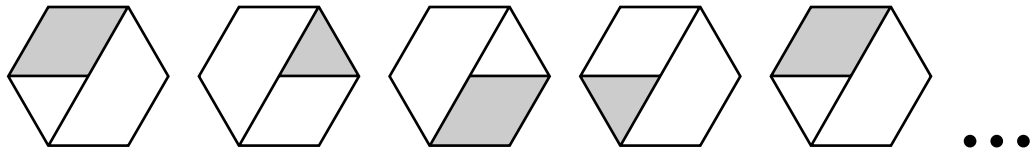


Which parts of the triangles are corresponding?

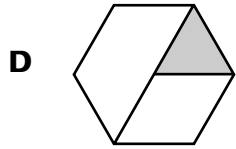
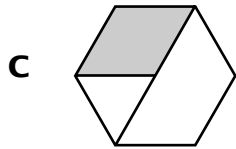
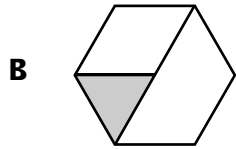
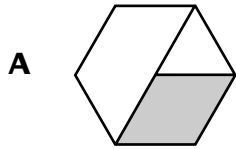
- F** \overline{SU} and \overline{XZ}
- G** $\angle S$ and $\angle X$
- H** \overline{TS} and \overline{YZ}
- J** $\angle T$ and $\angle Y$

17

Dudley draws the repeating pattern below.



Which shape should Dudley draw next to continue the pattern?



18

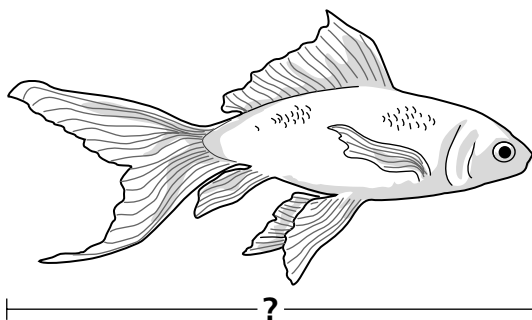
Which list could represent the four angle measures of a quadrilateral if one angle measures 125° ?

- F** $10^\circ, 10^\circ, 125^\circ, 125^\circ$
- G** $15^\circ, 15^\circ, 25^\circ, 125^\circ$
- H** $15^\circ, 15^\circ, 115^\circ, 125^\circ$
- J** $55^\circ, 55^\circ, 125^\circ, 125^\circ$

19

Use your ruler to help you solve this problem.

Yuri went to the pet store and bought the goldfish shown below.



What is the length, in inches, of Yuri's goldfish?

- A** $2\frac{1}{4}$
- B** $2\frac{1}{2}$
- C** $2\frac{3}{4}$
- D** $2\frac{7}{8}$

20

Amanda is planting flower seeds in flowerpots. If she plants 144 seeds and she plants 6 seeds in each flowerpot, how many flowerpots will Amanda use?

- F** 864
- G** 138
- H** 24
- J** 22

21

Each year a fifth-grade class holds a bake sale. The list below shows the number of cookies sold in the last 7 years.

21, 33, 61, 52, 48, 21, 58

What is the mean (average) number of cookies sold in the past 7 years?

- A** 21
- B** 40
- C** 42
- D** 48

22

In 1986, approximately 800,000 people attended a free concert at New York City's Central Park. How many 10 thousands are equal to 800,000?

- F** 8
- G** 80
- H** 800
- J** 8,000

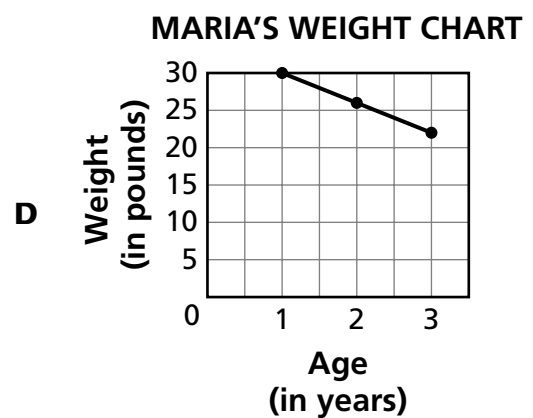
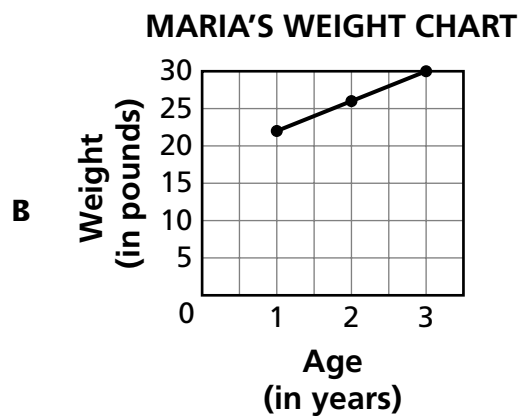
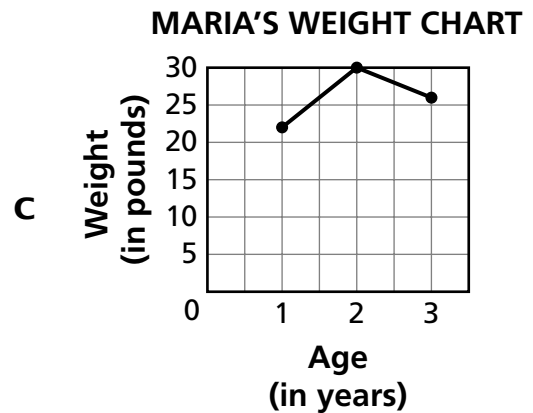
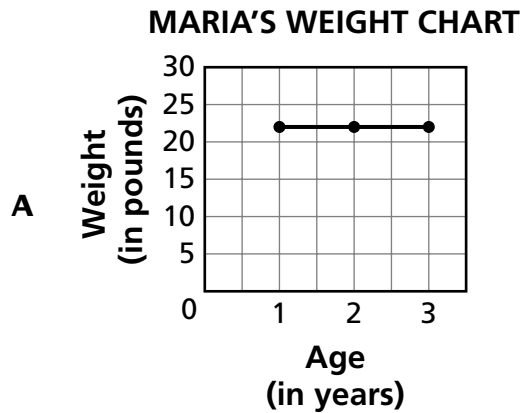
Go On

The table below shows Maria's weight at different ages.

MARIA'S WEIGHT CHART

Age (in years)	Weight (in pounds)
1	22
2	26
3	30

Which graph correctly shows the information in the table?



24

Abdul wants to build a fence around his rectangular garden. The length of the garden is 20.5 yards, and the width is 30.5 yards. What is the perimeter of Abdul's garden?

$$\text{perimeter of rectangle} = (2 \times \text{length}) + (2 \times \text{width})$$

- F** 41 yards
- G** 61 yards
- H** 102 yards
- J** 112 yards

25

The ratio of the number of gallons of milk to the number of boxes of cereal in Julie's grocery cart is 2:3. Which ratio is equivalent to 2:3?

- A** $\frac{2}{3}$
- B** 23%
- C** 3:2
- D** 3 out of 2

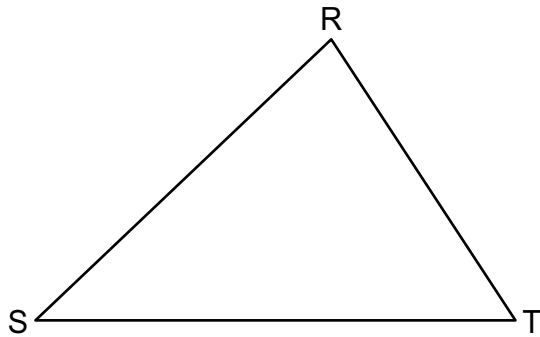
Go On

26

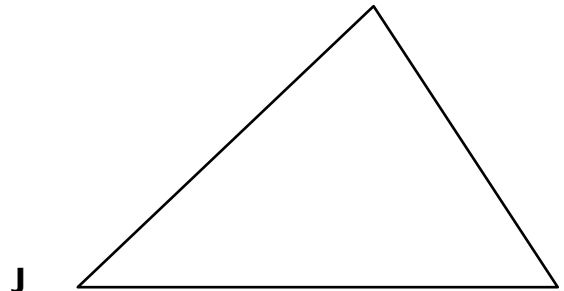
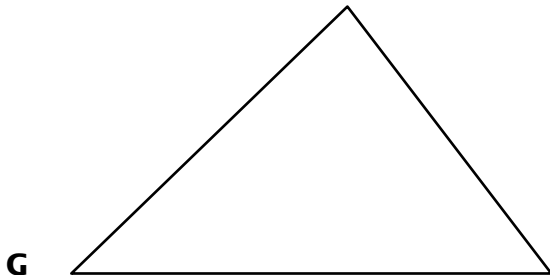
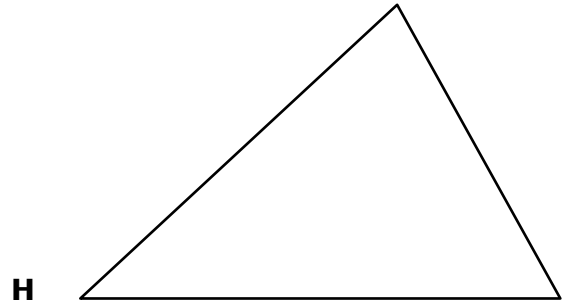
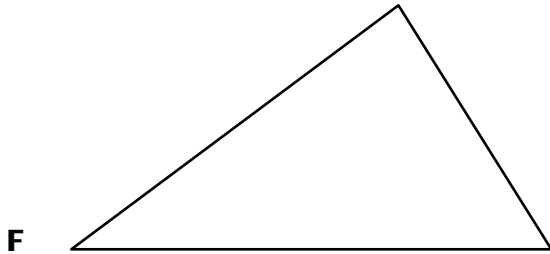


Use your ruler to help you solve this problem.

Blake drew triangle RST below.



Which triangle is congruent to triangle RST?



STOP



Grade 5
Mathematics
Book 1
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