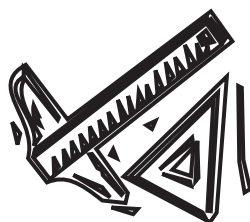




New York State Testing Program

Mathematics

Book 1



May 10 and 11, 2005



Developed and published by CTB/McGraw-Hill LLC, a subsidiary of The McGraw-Hill Companies, Inc., 20 Ryan Ranch Road, Monterey, California 93940-5703. Copyright © 2005 by New York State Education Department. All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of New York State Education Department.

Part 1

Sample A

The school auditorium was $\frac{7}{8}$ full. What percent of the auditorium was full?

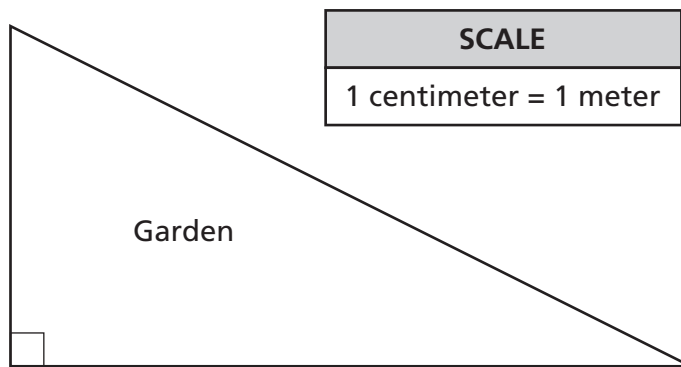
- A 7.8%
- B 37.5%
- C 62.5%
- D 87.5%

Sample B



Use your ruler to help you solve this problem.

A garden is in the shape of a triangle as shown in the figure below. The garden is to be enclosed by a fence.



Based on the scale, how much fencing is needed to enclose the garden?

- F 19.1 meters
- G 20.7 meters
- H 23.5 meters
- J 26.6 meters

STOP

- 1** What is the missing number in the pattern below?

2	6	18	54	?	486
---	---	----	----	---	-----

- A** 72
- B** 90
- C** 108
- D** 162

- 2** What is the value of $2^3 + 2^4$?

- F** 14
- G** 24
- H** 28
- J** 128

- 3** A spinner is divided into 6 equal sections numbered from 1 to 6. If the arrow is spun once, what is the probability that it will land on a section numbered 4 or 5?

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

- 4** Travis is three times as old as Anne. Mary is three years older than Travis. If Mary is 39 years old, how old is Anne?

- F** 12 years old
- G** 13 years old
- H** 14 years old
- J** 16 years old

- 5** The human heart beats an average of 37,800,000 times in one year. What value of x will make 3.78×10^x have the same value as 37,800,000 ?

- A** -5
- B** -7
- C** 5
- D** 7

- 6** Tina is making a scale model of a monument that is 155 feet tall. She uses a scale of 1 inch = 5 feet. How tall should Tina make her model?

- F** 5 inches
- G** 8 inches
- H** 13 inches
- J** 31 inches

7 At the grocery store, Jerry spent \$24.75 for 3 pounds of chicken and 3 pounds of cheese. The cheese cost \$4.50 per pound. What was the cost of the chicken per pound?

- A \$2.75
- B \$3.75
- C \$5.75
- D \$6.75

8 Four students are reading the same book. The table below shows the portion that each student has read.

READING RECORD

Student	Portion Read
Frankie	$\frac{7}{10}$
Jacqueline	$\frac{2}{3}$
Pierre	$\frac{5}{8}$
Yolanda	$\frac{3}{4}$

Which student has read the largest portion of the book?

- F Frankie
- G Jacqueline
- H Pierre
- J Yolanda

9 Which unit of measurement would be most appropriate for measuring the area of a page of newspaper?

- A** square millimeters
- B** square centimeters
- C** square meters
- D** square kilometers

10 What is the value of the expression $7 + 5 \times (-3) - (6 - 2) \div 2$?

- F** -10
- G** -16
- H** -20
- J** -38

11 Which information is *not* needed to calculate the volume of a cylindrical can?

- A** value of π
- B** height of the can
- C** weight of the can
- D** radius of the base of the can

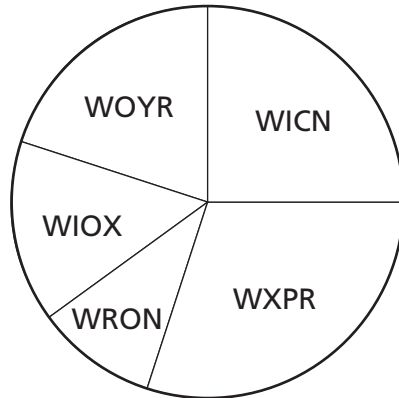
12 What is the value of n in the equation below?

$$2n - 5 = 23$$

- F** 9
- G** 14
- H** 26
- J** 28

- 13** The circle graph below shows the favorite radio stations of the students in Julie's school.

RADIO STATION SURVEY



Julie's teacher asks her to estimate what percent of the students chose WXPR. Which best represents the percent of students who chose WXPR?

- A** 10%
- B** 25%
- C** 30%
- D** 45%

- 14** As students entered a concert, a key chain was given to every second student in line. T-shirts were given to every third student in line. Which student in line was the first to receive both a key chain and a T-shirt?

- F** 5th
- G** 6th
- H** 8th
- J** 9th



Book 1
Mathematics
Grade 8
May 10 and 11, 2005

The McGraw-Hill Companies