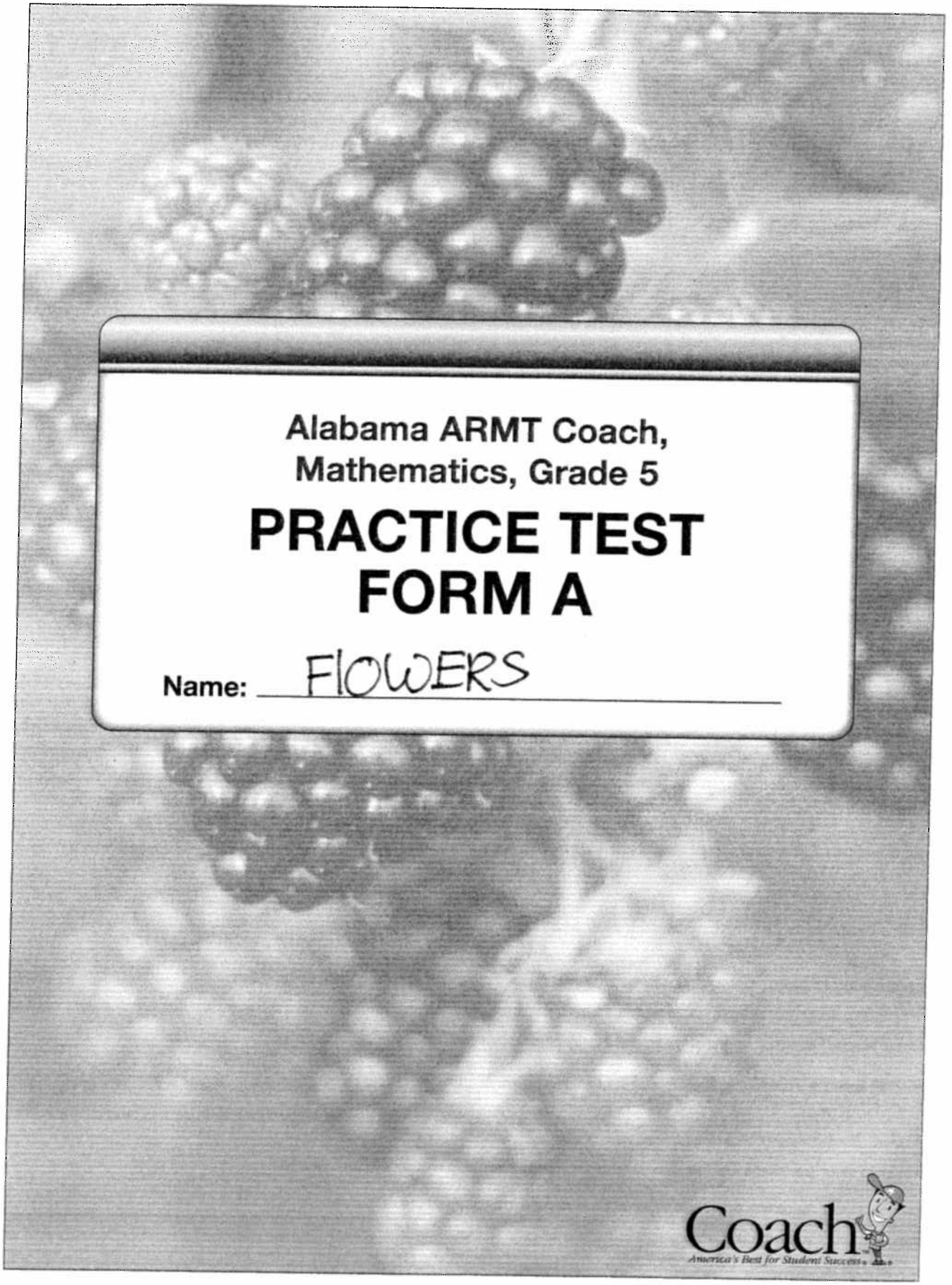


Alabama ARMT Coach,
Mathematics, Grade 5

PRACTICE TEST FORM A

Name: FLOWERS

Coach
America's Best for Student Success

Alabama ARMT Coach, Practice Test Form A, Mathematics, Grade 5
81ALPTa

Cover Image: Blackberries, the state fruit. © Patrick Johns/CORBIS.

Triumph Learning® 136 Madison Avenue, 7th Floor, New York, NY 10016
Kevin McAliley, President and Chief Executive Officer

© 2008 Triumph Learning, LLC

All rights reserved. No part of this publication may be reproduced in whole or in part, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without written permission from the publisher.

Printed in the United States of America.

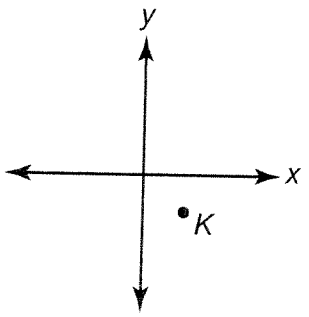
10 9 8 7 6

1. Christina has two rabbits. Thumper weighs 3.7 pounds. Fluffy weighs 4.9 pounds.

   How many more pounds is Fluffy than Thumper?

0.8	1.2	1.8	NH
A	**B**	**C**	**D**

2. In which quadrant is point K located?



I	II	III	IV
A	**B**	**C**	**D**

3. Which of the following expressions would go in the ☐ to demonstrate the associative property of multiplication?

$32 \times 18 \times (29 \times 42) =$ ☐

A $32 \times 18 \times (42 \times 29)$
B $(29 \times 42) \times 32 \times 18$
C $(32 \times 18) \times 29 \times 42$
D $32 + 18 + (29 + 42)$

4. Which number goes in the ☐ to make the statement below true?

780 liters = ☐ milliliters

A 78
B 7800
C 78,000
D 780,000

Duplicating any part of this book is prohibited by law.

5. Paula's puppy weighs 4.837 kilograms.

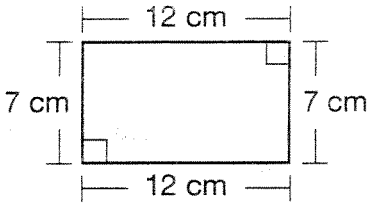
Which number is *closest* to 4.837?

A 5
B 4.9
C 4.84
D 4.83

6. $\frac{1}{4} + \frac{3}{10} = \square$

Mark your answer in the answer grid.

7. What is the perimeter, in centimeters, of the rectangle shown below?



84	38	31	19
A	**B**	**C**	**D**

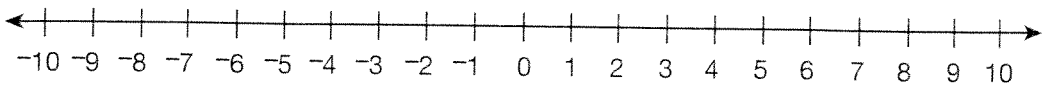
8. Alvin has $40.00 in his wallet when he goes to the music store. Alvin wants to buy two CDs. One of the CDs costs $16.99 and the other costs $18.75, including tax.

How much will Alvin pay for the two CDs?

A $4.26
B $25.64
C $35.74
D $75.74

Duplicating any part of this book is prohibited by law.

9. What number is 7 spaces to the left of 2 on the number line below?



A -9 **B** -7 **C** -5 **D** 9

10. $8\frac{4}{5} - 2\frac{4}{5} = \square$

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

11. Aram had \$30. He spent half of that money on movie tickets and 3 more dollars on a snack for the movie.

Which number sentence below could be used to determine the total number of dollars he had left after the movie?

A $(30 \times 2) + 3 = \square$

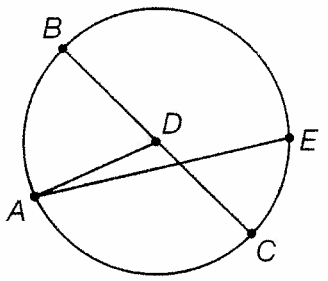
B $(30 \times 2) - 3 = \square$

C $(30 \div 2) + 3 = \square$

D $(30 \div 2) - 3 = \square$

Duplicating any part of this book is prohibited by law.

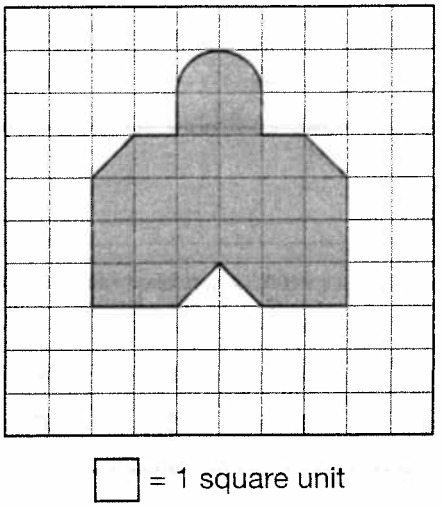
Points A, B, C, and E are on circle D below.



12. Which of the following segments is a diameter of circle D?

$\overline{BC}$	$\overline{AD}$	$\overline{AE}$	$\overline{CD}$
A	**B**	**C**	**D**

13. Which is *closest* to the area, in square units, of the shaded figure below?



20	22	26	28
A	**B**	**C**	**D**

Duplicating any part of this book is prohibited by law.

14. Which expression should go in the ☐ to make the number sentence true?

(8 + 22) × 3 = ☐

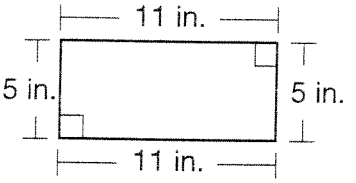
A (8 + 22) × 3 × 0
B 8 × (22 + 3)
C (8 + 22) × 3 + 1
D (22 + 8) × 3

15. Each letter in the word M O N T G O M E R Y is written on a separate piece of paper. Each piece of paper is the same size. The pieces of paper are put into a bag. One of the pieces of paper is selected from the bag at random.

What is the probability that the letter on the first piece of paper selected will be an M?

$\frac{1}{10}$	$\frac{2}{10}$	$\frac{8}{10}$	$\frac{9}{10}$
A	**B**	**C**	**D**

16. What is the perimeter, in inches, of the rectangle shown below?



Mark your answer in the answer grid.

Duplicating any part of this book is prohibited by law.

17. Zach bought 1.8 pounds of apples and 2.4 pounds of oranges.

How many pounds of fruit did Zach buy?

3.2	4.2	4.4	NH
A	**B**	**C**	**D**

18. $4\frac{7}{9} - 3\frac{1}{3} = \square$

$1\frac{6}{9}$	$1\frac{4}{9}$	$1\frac{2}{9}$	$1\frac{1}{9}$
A	**B**	**C**	**D**

19. Yemi's kitchen table weighs 54 pounds.

What is the table's weight in *ounces*?

540	648	864	5,400
A	**B**	**C**	**D**

20. R.J. is 5 years older than twice his cousin's age. His cousin is 7 years old.

Which number sentence below could be used to determine R.J.'s age?

A $5 + (\square \times 2) = 7$

B $(2 \times 7) + \square = 5$

C $\square + (2 \times 5) = 7$

D $5 + (2 \times 7) = \square$

21. Which number sentence below demonstrates the identity property of multiplication?

A $(13 \times 3) \times 1 = 13 \times 3$

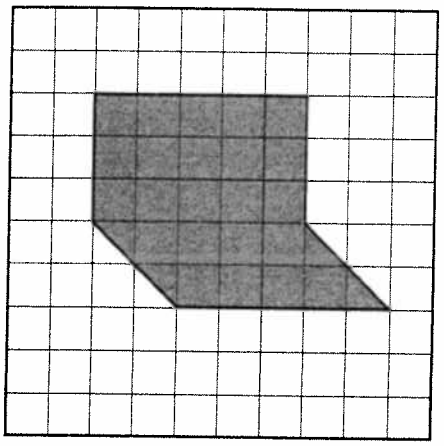
B $(13 \times 3) + 0 = 13 \times 3$

C $13 \times 3 = 3 \times 13$

D $(13 \times 3) \times 0 = 0$

Duplicating any part of this book is prohibited by law.

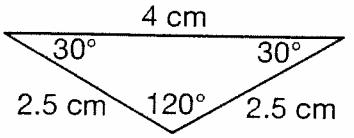
22. Which is *closest* to the area, in square units, of the shaded figure below?



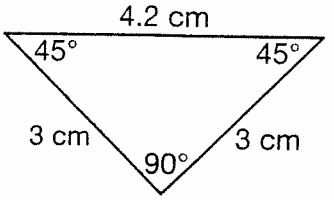
□ = 1 square unit

20 **A** 23 **B** 25 **C** 27 **D**

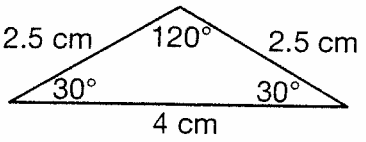
23. Which of the following is congruent to the triangle below?



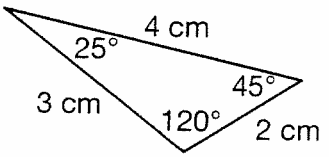
A



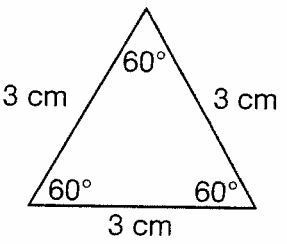
B



C



D



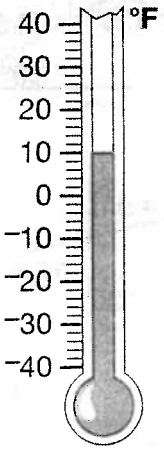
Duplicating any part of this book is prohibited by law.

24. There are 187 students seated in the cafeteria. The students are sitting at 17 long tables. The same number of students is seated at each table.

How many students are sitting at each table?

Mark your answer in the answer grid.

Look at the thermometer below.



25. What will be the temperature, in degrees Fahrenheit, if it drops 40 degrees?

50°	40°	−30°	−40°
A	**B**	**C**	**D**

26. There are 6 red marbles, 12 blue marbles, and 2 green marbles in a bag. There are no other marbles in the bag. Without looking, Jean selected a marble from the bag.

What is the probability Jean selected a red marble from the bag?

$\frac{2}{20}$	$\frac{6}{20}$	$\frac{12}{20}$	$\frac{14}{20}$
A	**B**	**C**	**D**

Duplicating any part of this book is prohibited by law.

27. Below are the weights of four boxes that Sharon needs to mail.

1.513 kg, 1.603 kg,
1.583 kg, 1.575 kg

Which number has the *least* value?

A 1.513
B 1.603
C 1.583
D 1.575

28. Which number goes in the ☐ to make the statement below true?

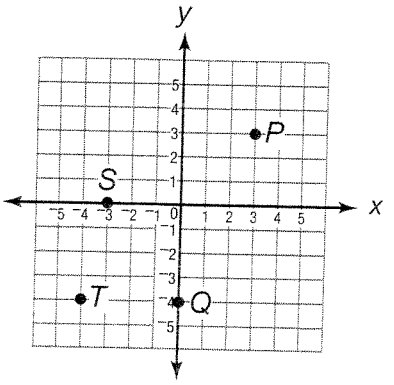
42 kilograms = ☐ grams

A 420
B 4200
C 42,000
D 420,000

29. What is the perimeter, in centimeters, of a rectangle that is 14 centimeters long and 6 centimeters wide?

20	28	32	40
A	**B**	**C**	**D**

30. Which of the following points is located on the *y*-axis?



P	*Q*	*R*	*S*
A	**B**	**C**	**D**

Duplicating any part of this book is prohibited by law.

31. A real estate company is asking $1,315,200 for a building. A buyer offers $175,000 less than the asking price.

How much did the buyer offer for the building?

A $1,490,200
B $1,240,200
C $1,140,200
D NH

32. Elizabeth spent $1\frac{3}{8}$ hours raking leaves and $1\frac{1}{8}$ hours reading.

How many hours in all did she spend doing these two activities?

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

33. Madeline is selling rolls of wrapping paper to raise money for her soccer team. She has 9 rolls of blue paper, 5 rolls of purple paper, and 7 rolls of silver paper in a large black bag. Each roll is the same size. Mrs. Potik wants to buy one roll of paper. Since Mrs. Potik likes all of those colors, she asks if she can reach into the bag and choose a roll without looking.

What is the probability that Mrs. Potik will choose a roll of purple paper?

Express your answer as a fraction.

Mark your answer in the answer grid.

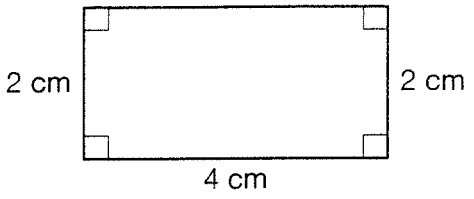
34. $1\frac{1}{6} + 2\frac{5}{6} = \square$

3	$3\frac{6}{12}$	$3\frac{4}{6}$	4
A	**B**	**C**	**D**

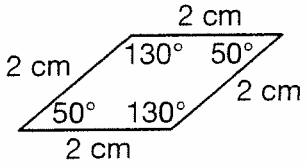
Duplicating any part of this book is prohibited by law.

35. Which of the following is a regular polygon?

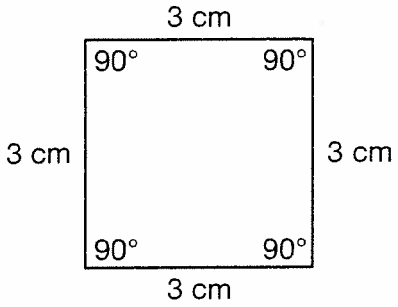
A



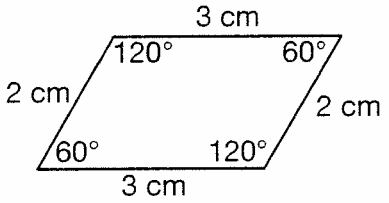
B



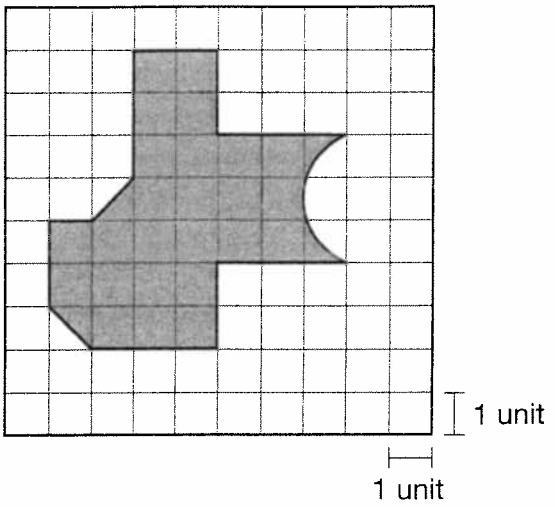
C



D



36. Which is *closest* to the perimeter, in units, of the shaded figure below?



29	26	23	20
A	**B**	**C**	**D**

Duplicating any part of this book is prohibited by law.

37. Demetrius read that every person should drink 8 glasses of water per day. He also read that each glass should contain about 6 ounces of water.

Which number sentence below could be used to determine the total number of ounces of water that a person should drink per day?

A $\square = 8 \times 6$

B $8 \div \square = 6$

C $8 - 6 = \square$

D $6 + \square = 8$

38. $9.427 - 5.09 = \square$

A 14.517

B 8.918

C 4.337

D 3.527

39. In 2005, the population of Alabama was 4,557,808.

What is this number in expanded form?

A 45,000,000 + 50,000 + 7,000 + 800 + 8

B 4,000,000 + 500,000 + 50,000 + 7,000 + 800 + 80

C 4,000,000 + 500,000 + 50,000 + 7,000 + 80 + 8

D 4,000,000 + 500,000 + 50,000 + 7,000 + 800 + 8

Duplicating any part of this book is prohibited by law.

40. $\frac{6}{7} - \frac{3}{14} = \square$

Mark your answer in the answer grid.

41. Franklin works in a warehouse. He was told to fill as many boxes with dictionaries as he could. Each box holds exactly 16 dictionaries. He filled 11 boxes and had 7 dictionaries left over.

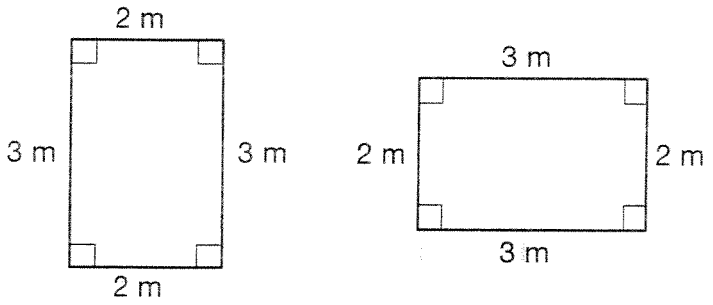
How many dictionaries were there in all?

123	176	183	192
A	**B**	**C**	**D**

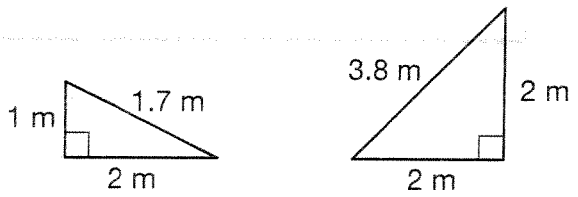
Duplicating any part of this book is prohibited by law.

42. Which of the following represents a pair of congruent polygons?

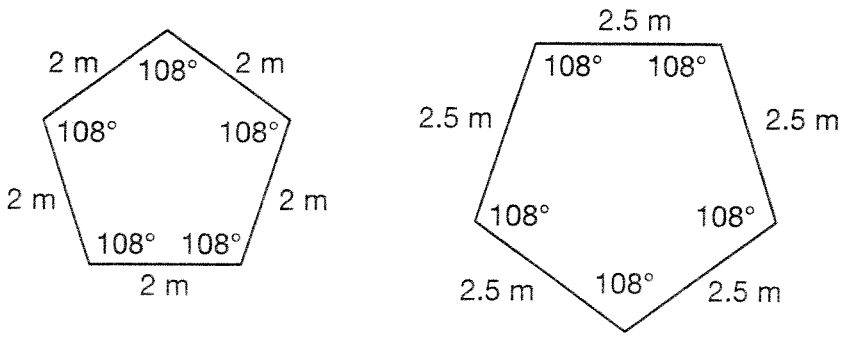
A



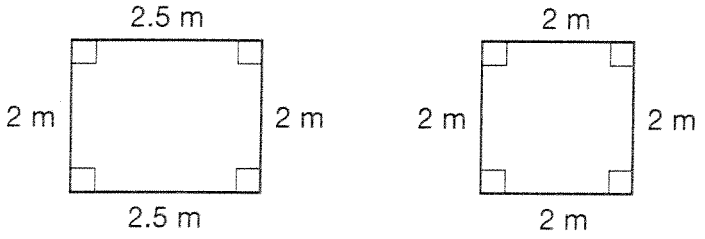
B



C



D



Duplicating any part of this book is prohibited by law.

43. Which property of whole numbers is demonstrated by the number sentence below?

64 + (31 × 52) = 64 + (52 × 31)

A Identity property of addition

B Commutative property of multiplication

C Associative property of multiplication

D Commutative property of addition

44. Zane bought 3 baseball caps at a cost of $11 each, including tax. He paid the clerk with a fifty-dollar bill.

Which number sentence below could be used to determine the amount of change he received?

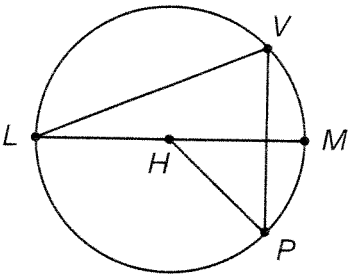
A $(11 \times 3) + 50 =$ ☐

B $3 \times 11 \times 50 =$ ☐

C $50 - (11 \div 3) =$ ☐

D $50 - (11 \times 3) =$ ☐

Points L, M, P, and V are on circle H below.

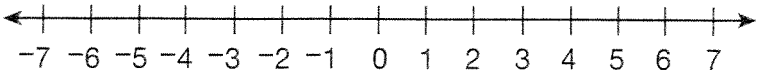


45. Which of the following segments is a radius of circle H?

$\overline{LM}$	$\overline{HM}$	$\overline{LV}$	$\overline{PV}$
A	**B**	**C**	**D**

Duplicating any part of this book is prohibited by law.

46. What number is 9 spaces to the left of 6 on the number line below?



A	B	C	D
12	3	−3	−6

47. At the playground, the distance between a swing set and a slide is 15 yards.

What is the total number of *inches* in 15 yards?

Mark your answer in the answer grid.

48. There are 13 girls and 12 boys in Ms. Wong's class. Each student's name is written on a piece of paper and placed in a bag.

If Ms. Wong picks one piece of paper from the bag without looking, what is the probability that it will be a boy's name?

A	B	C	D
$\frac{1}{12}$	$\frac{12}{25}$	$\frac{13}{25}$	$\frac{12}{13}$

Duplicating any part of this book is prohibited by law.

49. $3\frac{5}{8} + 4\frac{1}{8} = \square$

A	B	C	D
$7\frac{6}{16}$	$7\frac{4}{8}$	$7\frac{6}{8}$	8

50. Daria is buying two items at the hardware store: a toolbox for $15.96 and a hammer for $6.89. She gives the clerk two $20 bills.

How much change will Daria get back from the clerk?

A $24.04
B $22.85
C $18.25
D $17.15

51. The chart below shows the price of a grilled cheese sandwich at four different diners.

Grilled Cheese Sandwiches

Diner	Price of Sandwich
The Athenian	$3.15
Kelly's Diner	$2.85
Daisy Diner	$3.30
EZ Eats	$3.10

Which diner has the *second highest* price?

A The Athenian
B Kelly's Diner
C Daisy Diner
D EZ Eats

Duplicating any part of this book is prohibited by law.

This problem requires you to show your work and/or explain your reasoning. You may use drawings, words, and/or numbers in your answer. Your answer should be written so that another person could read it and understand your reasoning. It is important that you show all your work.

52. Sam has $25.00 to spend at the office supply store. The table below shows the items he wants to buy. All prices include tax. Sam wants to spend *at least* $20.00 but not more than $25.00.

Items to Buy

Item	Price
Highlighters	$4.29
Stapler	$7.85
Markers	$5.49
Paper shredder	$19.99
Paper clips	$2.59
Calendar	$12.75

a. What is 1 *possible* list of items Sam could buy that costs *at least* $20.00 but not more than $25.00?

b. What is a *different* list of items Sam could buy that costs *at least* $20.00 but not more than $25.00?

Show all your work and/or explain your reasoning *for each part* in the space provided in your answer document.

Duplicating any part of this book is prohibited by law.

This problem requires you to show your work and/or explain your reasoning. You may use drawings, words, and/or numbers in your answer. Your answer should be written so that another person could read it and understand your reasoning. It is important that you show all your work.

53. Robert surveyed several people to determine the months in which they go on vacation. The chart below shows his results.

Vacation Months

Month	Number of People
January	4
March	12
June	38
August	24
November	9

a. In which month did the *greatest* number of people go on vacation?

b. Give 2 *possible* reasons that could explain why the greatest number of people go on vacation during the month you named in **part a**.

Show all your work and/or explain your reasoning *for each part* in the space provided in your answer document.

Duplicating any part of this book is prohibited by law.

This problem requires you to show your work and/or explain your reasoning. You may use drawings, words, and/or numbers in your answer. Your answer should be written so that another person could read it and understand your reasoning. It is important that you show all your work.

54. The table below shows the areas of 6 countries.

Countries' Areas

Country	Area (in square miles)
Australia	2,967,893
India	1,269,338
Mexico	761,602
Peru	496,223
United States	3,718,691

a. What is 1 *possible* list of 3 countries that have a combined area of *at least* 7,400,000 square miles? What is the total area of the countries you listed?

b. What is a *different* list of 3 countries that have a combined area of *at least* 7,400,000 square miles? What is the total area of the countries you listed?

Show all your work and/or explain your reasoning *for each part* in the space provided in your answer document.

Duplicating any part of this book is prohibited by law.

This problem requires you to show your work and/or explain your reasoning. You may use drawings, words, and/or numbers in your answer. Your answer should be written so that another person could read it and understand your reasoning. It is important that you show all your work.

55. The chart below shows the number of items that were sold at the school store last week.

Items Sold

Item	Number Sold
Pen	42
Pencil	79
Notebook	11
Folder	23

a. What item sold the *greatest* number?

b. Give 2 *possible* reasons that could explain why the item you named in **part a** sold the most.

Show all your work and/or explain your reasoning *for each part* in the space provided in your answer document.

Duplicating any part of this book is prohibited by law.

Test Practice with *Coach* Means Better ARMT Scores!

Research shows that scores improve when students take authentic practice tests and become familiar with the exam format. Our practice booklets are precisely modeled after the actual ARMT and complement our ***Coach*** books—allowing you to benchmark student progress, identify areas that need extra attention, and help students improve their skills.

The leader in standards-based, state-customized test preparation for grades K–12, ***Coach*** builds student confidence and skills.

Special Features:

- ✔ **Full-length, authentic Practice Test, modeled after your state test**
- ✔ **Test questions cover all essential grade-level skills**
- ✔ **100% aligned to our *Coach* student texts for your convenience**

Triumph Learning has created outstanding classroom resources for more than 40 years. We continue to work with teachers and administrators to keep our books up to date and effective—improving test scores and maximizing student learning.

Please visit **www.triumphlearning.com** to learn about all our instructional materials.

Phone: (800) 221-9372 • Fax: (866) 805-5723 • E-mail: customerservice@triumphlearning.com

PLEASE RECYCLE

Triumph Learning®
A Haights Cross Communications® Company

Coach™
America's Best for Student Success®