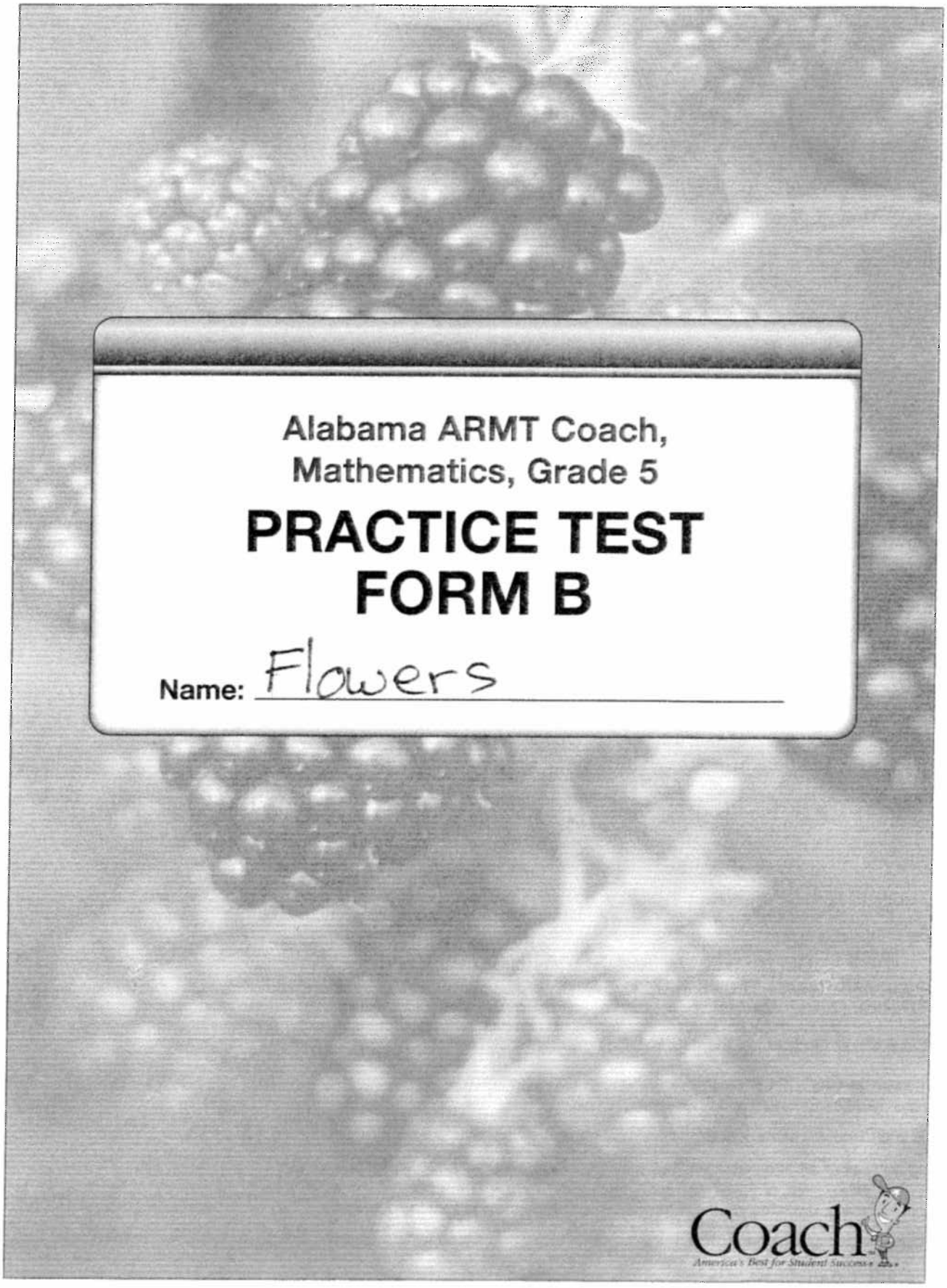

Alabama ARMT Coach,
Mathematics, Grade 5

PRACTICE TEST FORM B

Name: Flowers

Coach
America's Best for Student Success

Alabama ARMT Coach, Practice Test Form B, Mathematics, Grade 5
81ALPTb

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Kevin McAliley, President and Chief Executive Officer

Printed in the United States of America.

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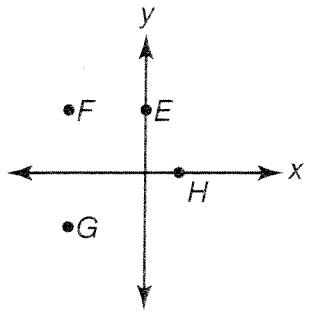
1. Eileen used $\frac{3}{8}$ cup of brown sugar to make an apple pie and $1\frac{3}{8}$ cups of brown sugar to make cookies.

   How many cups of sugar did Eileen use to make both desserts?

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

2. Which of the following points is located on the *x*-axis?



E	*F*	*G*	*H*
A	**B**	**C**	**D**

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

3 + (41 × 2) = 0 + 3 + (41 × 2)

A Identity property of addition
B Associative property of addition
C Identity property of multiplication
D Commutative property of addition

4. The Hoover Dam is about 243 yards high.

   What is the total number of *feet* in 243 yards?

A 81
B 729
C 2,430
D 2.916

5. About 3,000 items of clothing have been collected for a charity clothing drive.

Which number is *closest* to 3,000?

A 2,760
B 2,978
C 3,231
D 3,897

6. $\frac{9}{10} - \frac{1}{6} = \square$

Mark your answer in the answer grid.

7. What is the perimeter, in centimeters, of a rectangle that is 15 centimeters long and 9 centimeters wide?

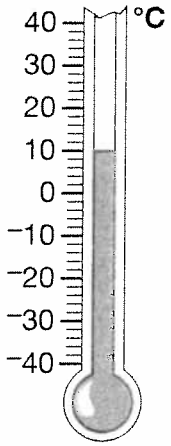
24	30	48	135
A	**B**	**C**	**D**

8. Francis bought 1.32 pounds of cranberries and 2.17 pounds of strawberries.

How many more pounds of strawberries than cranberries did Frances buy?

A 3.49
B 2.15
C 1.85
D NH

Look at the thermometer below.



9. What will be the temperature, in degrees Celsius, if it drops 20 degrees?

A	B	C	D
−20°	−10°	0°	30°

10. $5\frac{2}{9} + 2\frac{3}{9} = \square$

A	B	C	D
$7\frac{1}{9}$	$7\frac{5}{18}$	$7\frac{5}{9}$	$7\frac{6}{9}$

11. The 24 students in Mr. Heath's class each made 4 items to sell at the school crafts sale. Each item will be sold for 5 dollars.

Which number sentence below could be used to determine the total number of dollars that will be collected if every one of those items is sold?

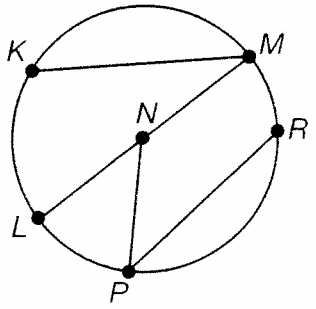
A $(24 \times 4) + 5 = \square$

B $(24 + 4) \times 5 = \square$

C $(24 \times 4) \times 5 = \square$

D $(24 \div 4) \times 5 = \square$

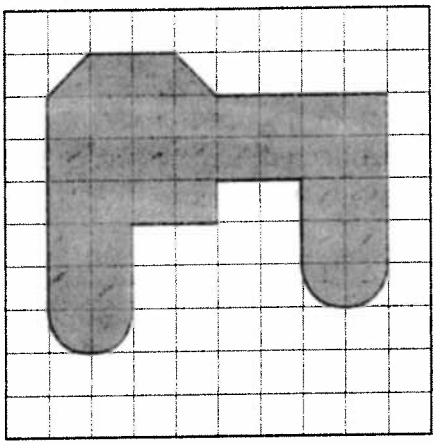
Points *K*, *L*, *M*, *R*, and *P* are on circle *N* below.



12. Which of the following segments is a radius of circle *N*?

A	B	C	D
$\overline{LM}$	$\overline{PR}$	$\overline{KL}$	$\overline{NP}$

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



□ = 1 square unit

40	35	30	25
A	**B**	**C**	**D**

14. Which number sentence below demonstrates the associative property of addition?

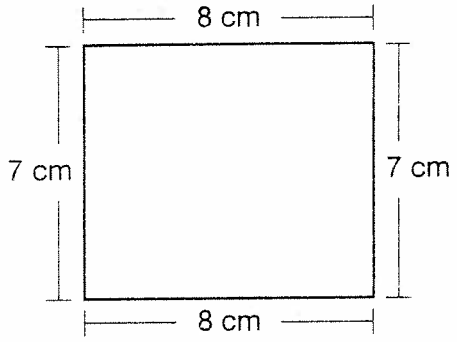
A $(34 + 18) + 26 = (18 + 34) + 26$
B $28 + 45 = (28 + 45) + 0$
C $(81 + 22) + 35 = 81 + (22 + 35)$
D $57 + 39 = 1 \times (57 + 39)$

15. There are 4 blue marbles, 8 white marbles, and 3 purple marbles in a bag. There are no other marbles in the bag. Without looking, Iris selected a marble from the bag.

What is the probability Iris selected a purple marble from the bag?

$\frac{3}{15}$	$\frac{4}{15}$	$\frac{8}{15}$	$\frac{13}{15}$
A	**B**	**C**	**D**

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



Mark your answer in the answer grid.

17. Haley wants to buy a flat-screen television. The model she wants costs $1,435.79 at her local electronics store. She finds out that she can buy the same model online for $112.84 less than at her local store.

How much will the television cost if she buys it online?

A $1,548.63
B $1,323.95
C $1,322.95
D NH

18. $11\frac{5}{8} + 3\frac{1}{4} = \square$

15	$14\frac{7}{8}$	$14\frac{1}{2}$	$8\frac{3}{8}$
A	**B**	**C**	**D**

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

14 kiloliters = ☐ liters

A 140
B 1,400
C 14,000
D 140,000

20. Samuel wants to earn $360 this summer mowing lawns. He earns $12 per lawn.

Which number sentence below can be used to determine the number of lawns Samuel will have to mow this summer?

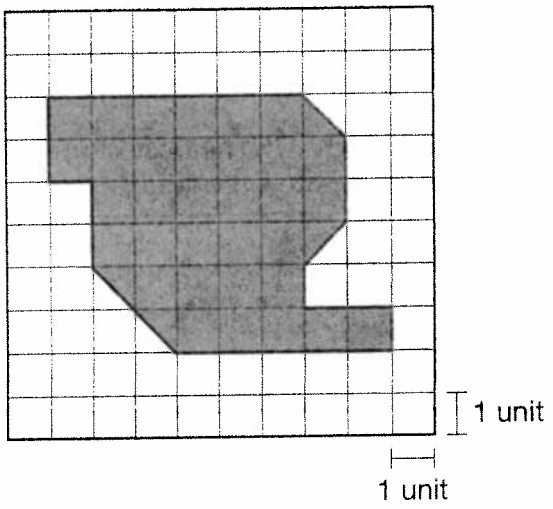
A $360 + $12 = ☐
B $360 − $12 = ☐
C $360 × $12 = ☐
D $360 ÷ $12 = ☐

21. Which of the following expressions would go in the ☐ to demonstrate the commutative property of addition?

7 + (12 + 65) = ☐

A (7 + 12) + 65
B 7 + (65 + 12)
C 7 + (12 + 65) + 0
D 7 × (12 + 65)

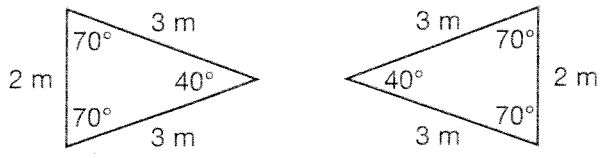
22. Which is *closest* to the perimeter, in units, of the shaded figure below?



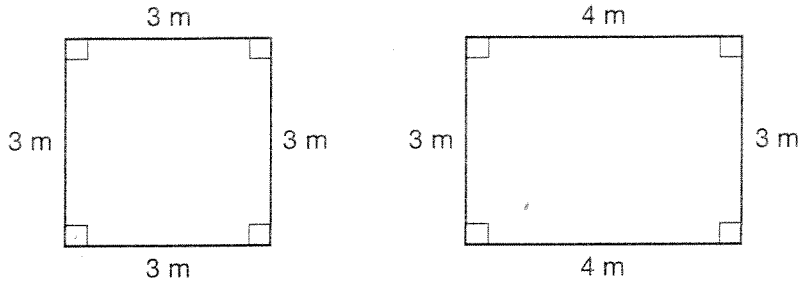
35	29	26	22
A	**B**	**C**	**D**

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

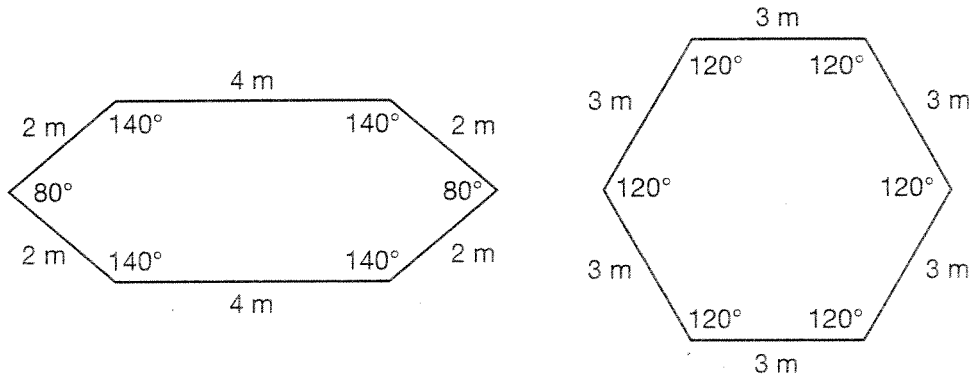
A



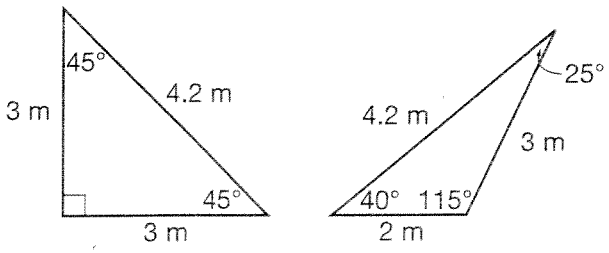
B



C



D



24. Joan works as a software engineer and earns $26 per hour. Last week, she worked 31 hours.

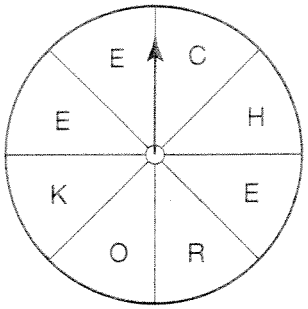
How much money did Joan earn last week?

Mark your answer in the answer grid.

25. What number is 5 spaces to the left of 2 on the number line below?

A −5 **B** −3 **C** 5 **D** 7

The spinner shown below is divided into 8 equal sections. Each of the letters in the word C H E R O K E E is put on the spinner as shown.



26. What is the probability on the first spin the arrow will land on a space with the letter E?

A $\frac{1}{8}$ **B** $\frac{2}{8}$ **C** $\frac{3}{8}$ **D** $\frac{5}{8}$

27. Which statement below is true?

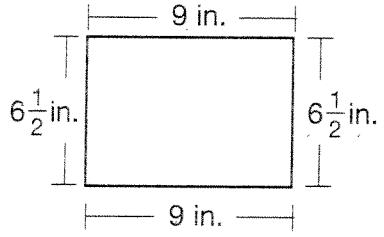
A $2.464 > 2.646$
B $2.258 < 2.251$
C $2.751 > 2.774$
D $2.349 < 2.394$

28. Quinn read that a humpback whale weighs about 39 tons.

What is the total number of *pounds* in 39 tons?

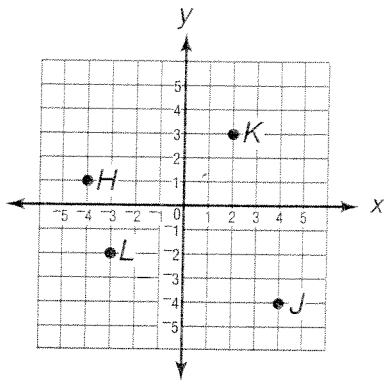
A 3,900
B 39,000
C 78,000
D 156,000

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



$54\frac{1}{2}$	32	31	$15\frac{1}{2}$
A	**B**	**C**	**D**

30. Which of the following points is located in Quadrant II?



H	*J*	*K*	*L*
A	**B**	**C**	**D**

31. Christopher owns a clothing store. He took inventory and found that he had 835 shirts in stock. Then the store received a shipment of 14 boxes of shirts. Each box contained 30 shirts.

How many shirts did Christopher's store have after the shipment was received?

A 420
B 881
C 1,255
D NH

32. $8.923 + 4.519 = \square$

A 4.404
B 12.442
C 13.432
D 13.442

33. Khalid has a bag of tiles, each of which is the same size. The table below shows the number of tiles of each color he has.

Tiles in a Bag

Color	Number of Tiles
Black	7
Gray	6
Orange	3
Tan	5

If Khalid reaches into the bag and picks a tile without looking, what is the probability that he will choose a gray tile?

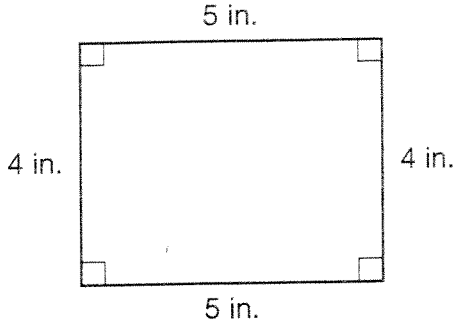
Express your answer as a fraction.

Mark your answer in the answer grid.

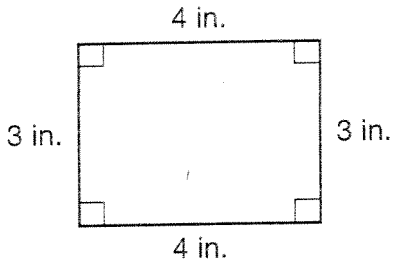
34. $3\frac{3}{4} - 1\frac{5}{16} = \square$

A $2\frac{1}{2}$ **B** $2\frac{7}{16}$ **C** $2\frac{1}{8}$ **D** $2\frac{1}{16}$

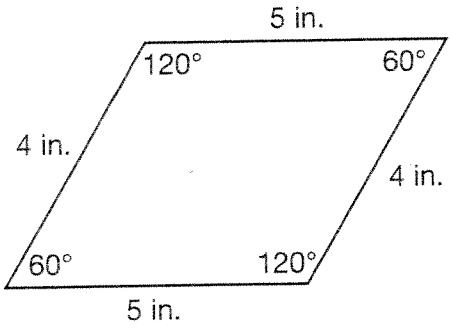
35. Which of the following is congruent to the rectangle below?



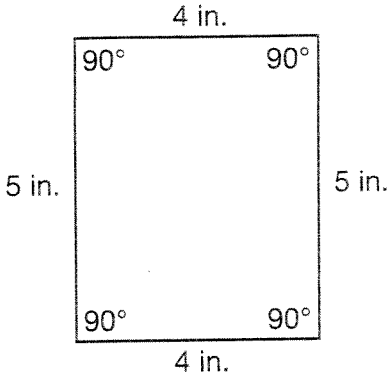
A



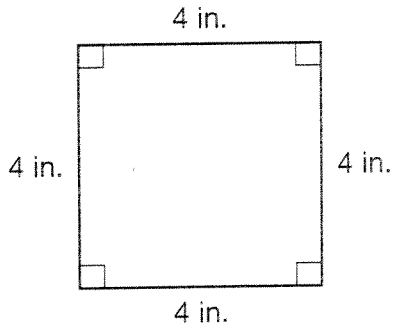
B



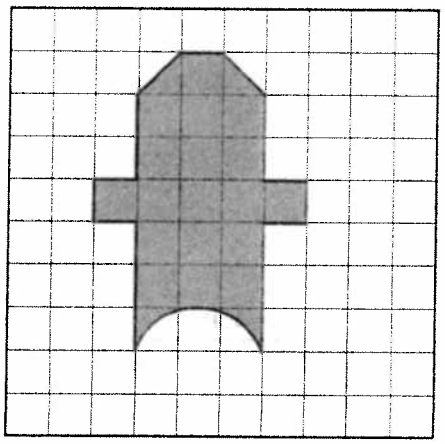
C



D



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



□ = 1 square unit

30	24	22	20
A	**B**	**C**	**D**

37. A school ordered 107 new math textbooks. The school already had 345 math textbooks.

Which number sentence below could be used to determine the total number of math textbooks the school will have when the order comes in?

A □ = 345 + 107

B □ = 345 − 107

C □ = 345 × 107

D □ = 345 ÷ 107

38. Danielle bought 4 packs of mints for $0.82 each and a granola bar for $1.59, including tax.

How much did Danielle pay in all for these items?

A $5.69
B $4.87
C $3.28
D $2.41

39. Which of the following shows 4,806,009 in expanded form?

A 4,000,000 + 800,000 + 600 + 9
B 4,000,000 + 800,000 + 60,000 + 9
C 4,000,000 + 800,000 + 6,000 + 9
D 4,000,000 + 80,000 + 6,000 + 9

40. $\frac{7}{20} + \frac{3}{10} = \square$

Mark your answer in the answer grid.

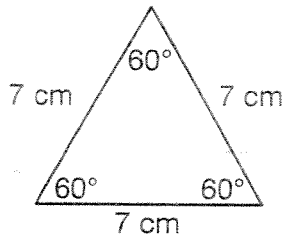
41. A total of 1,152 people signed up to audition for a professional dance team. The director wants to separate the people who are auditioning into 24 different audition groups, with an equal number of people in each group.

How many people will be in each group?

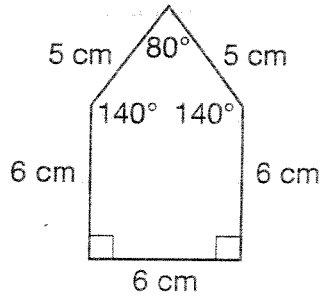
14	24	48	52
A	**B**	**C**	**D**

42. Which of the following is a regular polygon?

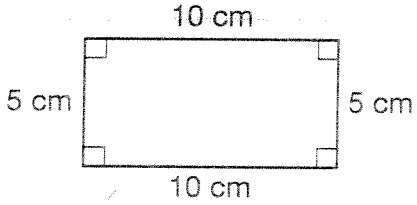
A



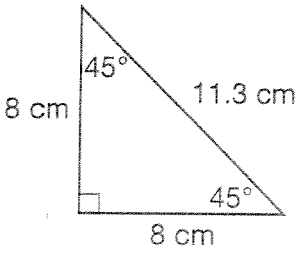
B



C



D



43. Which expression should go in the box to make the number sentence true?

$$8 + 3 = \square$$

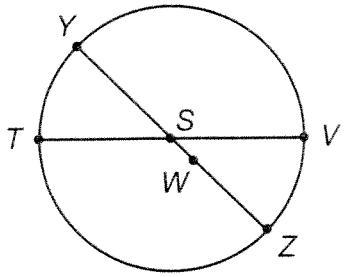
A $(8 + 3) \times 0$
B $(8 + 3) \times 1$
C $(8 + 3) + 1$
D $8 - 3$

44. There will be 450 students participating in Field Day this spring. Mrs. Kopcash wants to separate the students into equal groups of 10 students each.

Which number sentence below could be used to determine the number of groups Mrs. Kopcash will have for Field Day?

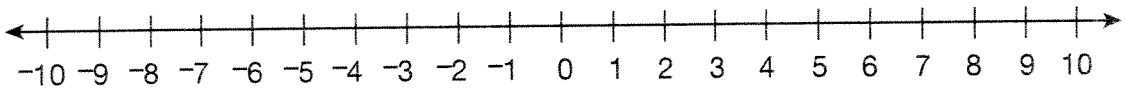
A $\square + 10 = 450$
B $450 - \square = 10$
C $450 \times \square = 10$
D $450 \div 10 = \square$

45. Which letter *best* represents the center of the circle below?



S **A** *T* **B** *Y* **C** *Z* **D**

46. What number is 9 spaces to the left of 1 on the number line below?



10 **A** 9 **B** −8 **C** −9 **D**

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

530 grams = ☐ milligrams

Mark your answer in the answer grid.

49. $\frac{7}{12} - \frac{1}{2} = \square$

A	B	C	D
$\frac{6}{10}$	$\frac{6}{14}$	$\frac{5}{12}$	$\frac{1}{12}$

48. There are 11 third-grade students, 18 fourth-grade students, and 10 fifth-grade students in the chorus. The chorus director puts each student's name in a hat and picks one at random to lead the warm-up.

What is the probability that the chorus director will pick a fifth-grade student's name?

A	B	C	D
$\frac{10}{39}$	$\frac{11}{39}$	$\frac{18}{39}$	$\frac{29}{39}$

50. Kayla is shopping for baby carriages. The first one she sees is 9.51 kilograms. The second one she sees is 6.72 kilograms.

How many more kilograms is the first carriage than the second carriage?

A	B	C	D
3.79	2.89	2.79	NH

51. The lengths shown below are distances, in meters, of students' long jumps. The lengths are ordered from *greatest* to *least*.

11.631 11.582 11.523 ☐ 11.476 11.462

Which number belongs in the ☐?

A	B	C	D
11.629	11.557	11.492	11.434

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. After a rainstorm, Kelly notices several branches that have fallen off a tree in her backyard. Kelly measured the lengths of 5 branches in meters. The table below shows her results.

Tree Branches

Branch	Length (in meters)
A	1.928
B	1.789
C	0.972
D	1.327
E	2.146
F	1.209

a. What is 1 *possible* list of branches that have a combined total length of *at least* 5.000 meters?

b. What is a *different* list of branches that have a combined total length of *at least* 5.000 meters?

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

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 at a family gathering to determine the hour at which they start work on Monday. The chart below shows his results.

Time Work Begins on Monday

Hour	Number of People
8:00 A.M.	7
9:00 A.M.	29
3:15 P.M.	14
5:00 P.M.	5
10:00 P.M.	3

a. At what time do the *greatest* numbers of people start work on Monday?

b. Give 2 *possible* reasons that could explain why people start work at different times.

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

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 number of pictures printed by 5 online printing companies.

Pictures Printed

Company	Number Printed
Capture	1,340,772
Good Times	874,323
Memories	730,981
Portrait	1,214,283
Smile!	954,270

a. What is 1 *possible* list of 3 companies that printed a combined total of *at least* 2,900,000 pictures? What is the total number of pictures printed by the 3 companies you listed?

b. What is a *different* list of 3 companies that printed a combined total of *at least* 2,900,000 pictures? What is the total number of pictures printed by the 3 companies you listed?

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

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 rakes that were sold by a local store during selected months last year.

Rake Sales During Selected Months

Month	Number of Rakes sold
February	3
April	8
July	14
October	36
December	12

a. During which month was the *greatest* number of rakes sold?

b. Give 2 *possible* reasons that could explain why the greatest numbers of rakes were sold 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.