STUDENT NAME _____
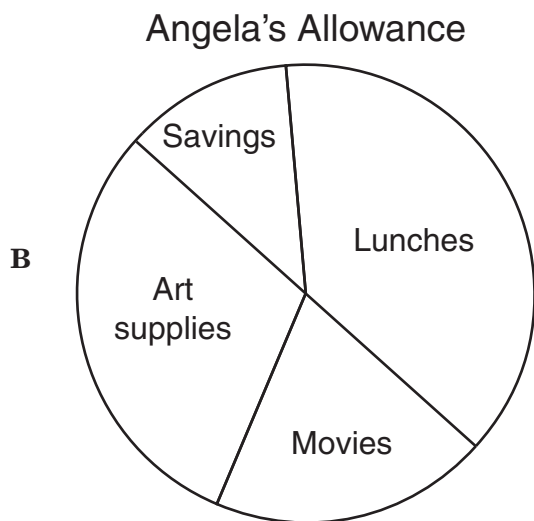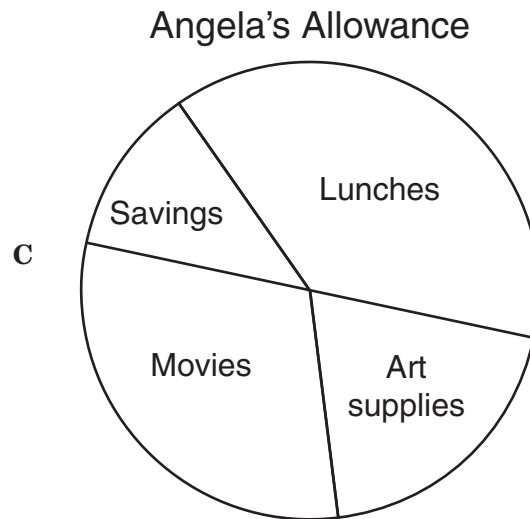
TAKS

**Texas Assessment
of Knowledge and Skills**

GRADE 6
MATHEMATICS
READING

Administered April 2006

1 Angela receives a $20.00 allowance each week. She spends $4.00 on art supplies, $6.00 on movies, and $7.50 on school lunches, and she puts $2.50 into savings. Which graph best represents Angela's allowance?

A

Angela's Allowance

Lunches
Art supplies
Savings
Movies

C

Angela's Allowance

Savings
Lunches
Movies
Art supplies

B

Angela's Allowance

Savings
Art supplies
Lunches
Movies

D

Angela's Allowance

Art supplies
Lunches
Savings
Movies

GO ON
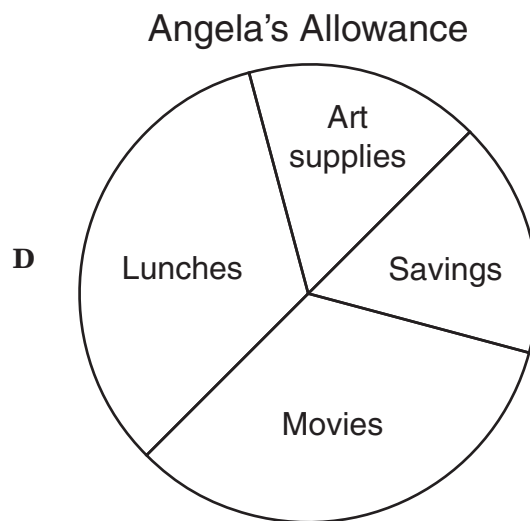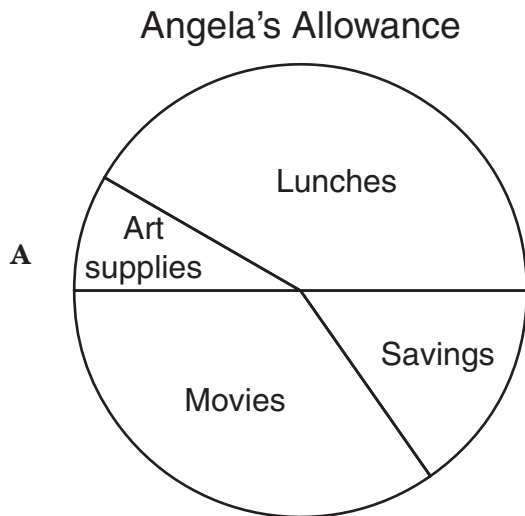
2 Mr. Duran handed out 32 sheets of graph paper equally among 8 groups of students. Which equation can be used to find s, the number of sheets of paper each group received?

F $s = 32 \div 8$

G $s = 32 - 8$

H $s = 32 \cdot 8$

J $s = 32 + 8$

3 What is the prime factorization of 220?

A $2 \cdot 5 \cdot 11$

B $2^2 \cdot 5 \cdot 5$

C $2^2 \cdot 5 \cdot 11$

D $2 \cdot 55$

4 At a community center there are a total of 11 tables in the dining room. Six of the tables seat 4 people each. Five of the tables seat 8 people each. What is the maximum number of people who can sit at the tables in the dining room?

F 40

G 12

H 22

J 64

Page 9

GO ON

5 Jeremy received $70 as a gift. He wanted to use the money to go to the movies and to buy a book. He wanted to save the money he had left. Which is the correct order of steps to find the amount of money Jeremy would have left to save?
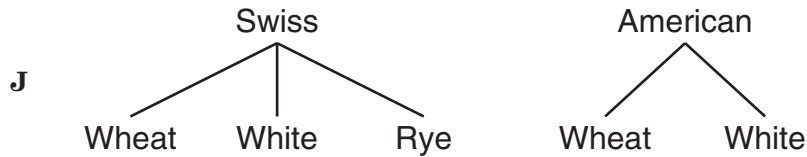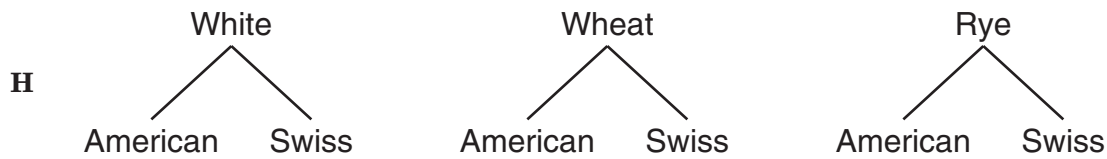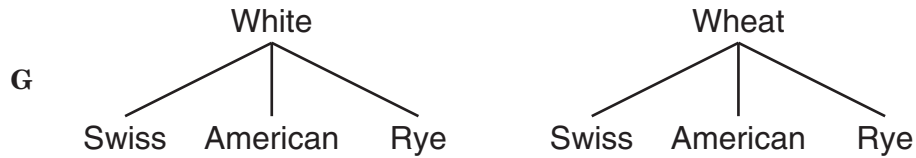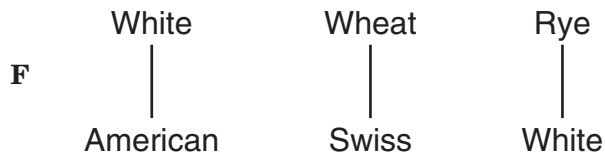
Step K: Find the sum of the costs of the movie and the book.

Step L: Find the difference between $70 and the sum of the costs of the movie and the book.

Step M: Identify the cost of the movie and the cost of the book.

A L, K, M

B M, K, L

C L, M, K

D K, L, M

6 A customer at Steven's Sub Stop can choose from white, wheat, and rye bread. The customer can also choose from American and Swiss cheese. Which diagram shows all the possible combinations of 1 type of bread and 1 type of cheese?

F

White	Wheat	Rye
American	Swiss	White

G

White
Swiss   American   Rye

Wheat
Swiss   American   Rye

H

White
American   Swiss

Wheat
American   Swiss

Rye
American   Swiss

**J**

Swiss
Wheat   White   Rye

American
Wheat   White

7 A recipe for pancakes requires 3 eggs and makes 12 pancakes. What is the ratio of eggs to pancakes?

A 12:3

B 1:4

C 3:1

D 1:3

GO ON

8 Irma has $10.00 to buy apples. Apples at the market are $2.50 per bag. Which additional information is needed to find the number of apples Irma can buy?

F The cost of apples per pound

G The size of each bag of apples

H The weight of each apple

J The number of apples in each bag

9 △*RST* shown below is an isosceles triangle.
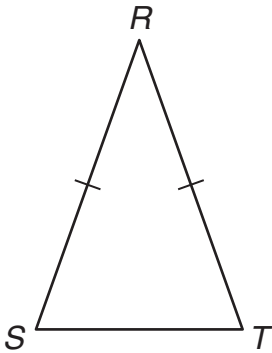
If the measure of ∠*R* is 40°, what is the measure of ∠*S*?

A 320°

B 140°

C 70°

D 40°

10 There are 6 children in Todd's family, including Todd. Their ages in years are listed below.

1, 2, 2, 8, 9, 14

What is the median of the children's ages?

F 6

G 5

H 2

J 13

11 The ratio of women to men in a local book club is 7 to 3. Which combination of women and men could the club have?

A 21 women and 9 men

B 35 women and 50 men

C 14 women and 9 men

D 21 women and 15 men

12 The table below shows the number of minutes it takes to wash different vehicles at Jay Dee's Car Wash.

Vehicle Washing Times

Type of Vehicle	Washing Time (minutes)
Car	8
Truck	10
Van	12

When the car-wash machine has been in use for a total of 2 hours, Jay must add one bottle of liquid soap to the machine. What is the number of trucks the machine can wash with each bottle of liquid soap?

F 5

G 12

H 20

J 32

13 Rosa sliced an orange into circular pieces to put into a bowl of punch. The piece shown below had a radius of 4 centimeters.
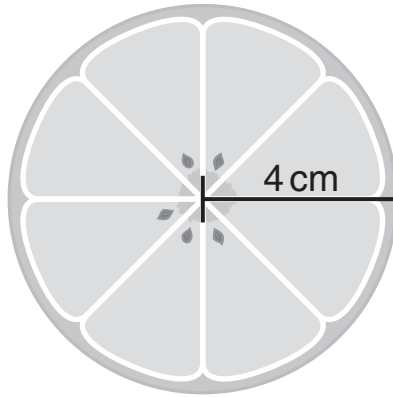
Which expression can be used to find the approximate circumference of this piece of orange?

A 2(4)

B π(4)

C 2(π)(8)

D 2(π)(4)

14 Acorn woodpeckers live in families. The family members collect acorns and store them in the trunks of trees. The table below shows information about the number of acorns collected and eaten by a family of woodpeckers on 3 days.

Acorns Collected and Eaten

Day	Number Collected	Number Eaten
Monday	23	8
Tuesday	29	10
Wednesday	42	9

Which expression best describes the information in the table if the family had stored 428 acorns before Monday?

F $428 - 23 + 8 - 29 + 10 - 42 + 9$

G $428 + 23 - 8 + 29 - 10 + 42 - 9$

H $23 - 8 + 29 - 10 + 42 - 9 - 428$

J $23 + 8 - 29 + 10 - 42 + 9 + 428$

15 Mrs. Sandoval has 60 folders, 45 pairs of scissors, and 30 rulers. What is the greatest common factor Mrs. Sandoval can use to divide the school supplies into equal groups?

A 3

B 5

C 10

D 15

16 Use the ruler on the Mathematics Chart to measure the lengths of the line segments below to the nearest centimeter.

Which best represents the ratio of *UV* to *XY*?

F   7:15

G   3:7

H   3:8

J   1:2

17 Mr. Cartwright bought 18 computer books for his bookstore. If he paid $24.95 for each book, about how much did Mr. Cartwright pay for the books?

A $40

B $600

C $500

D $300

18 Paul made 11 of the 20 shots he took at hockey practice yesterday. What percent of his shots did he make?

F   20%

G   11%

H   45%

J   55%

19 A parent group is planning an awards dinner for students, teachers, and parents. The parent group plans to seat the guests around a circular table that has seating for 30. The guests will be seated in the order of student, teacher, parent, in a repeating pattern. Will the 20th guest be a student, a teacher, or a parent?

A   Student

B   Teacher

C   Parent

D   Cannot be determined

20 Dee and Ella kept track of the miles they hiked over 4 days, as shown in the graph below.

Miles Hiked
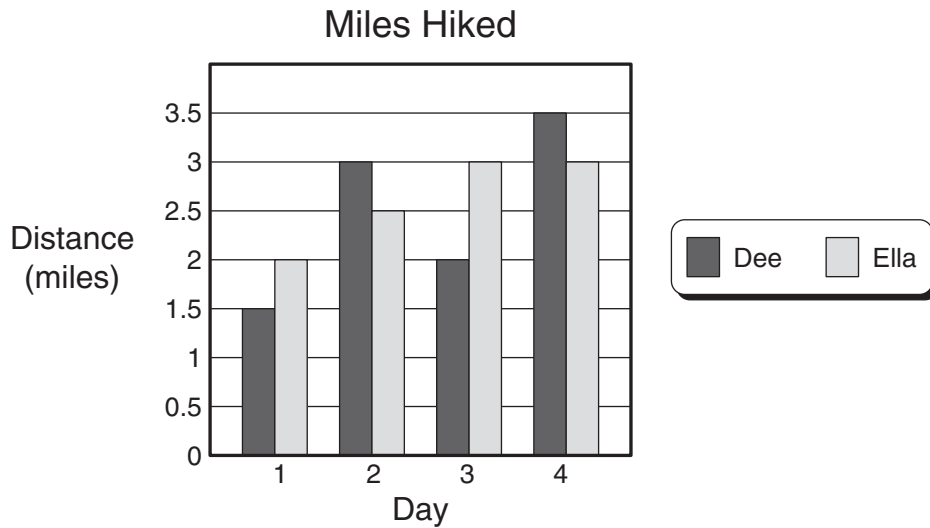
Which statement is best supported by the information in the graph?

F Dee walked more miles each day than Ella did.

G Ella walked more miles in all than Dee did on these 4 days.

H Dee and Ella walked more than 15 miles each on these 4 days.

J Ella walked 0.5 mile farther than Dee each day.

---

21 Sandra added $0.60 to the $25.00 she had saved. She then bought a CD that cost $13.79, including tax. Exactly how much money in dollars and cents should Sandra have left after paying for the CD?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

22 Elm's Carpeting Company sells carpet by the square yard. A salesperson at the company uses the table below to calculate the amount of carpet needed to cover floor areas of different sizes.

Carpet Calculations

Area of Floor (square feet)	Amount of Carpet (square yards)
25	2.78
50	5.56
100	11.11
150	16.67
200	22.22
250	27.78
300	33.33

Which statement describes the calculation used to determine the amount of carpet needed for a given area of floor?

F The area of the floor is divided by 12.

G The area of the floor is divided by 10.

H The area of the floor is divided by 9.

J The area of the floor is divided by 3.

23 Jocelyn made a spinner with equal sections, as shown below.
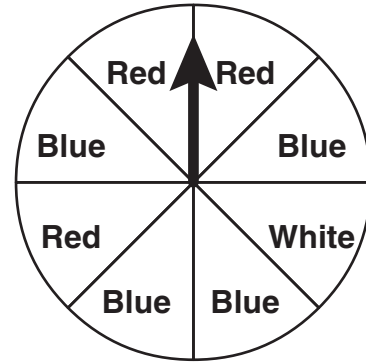
If Jocelyn spins only one time, what is the probability that the arrow will NOT land on a red section of the spinner?

A $\dfrac{1}{8}$

B $\dfrac{5}{8}$

C $\dfrac{3}{8}$

D $\dfrac{1}{2}$

24 The temperature was 47°F at 10 A.M. and 68°F at 3 P.M. The temperature decreased by about 4°F per hour after 3 P.M. About how much warmer was the temperature at 5 P.M. than it was at 10 A.M.?

F 0°F

G 10°F

H 20°F

J 30°F

25 Rafael pays $550 in rent each month. Which table best represents the relationship between m, the number of months, and r, the amount he pays in rent for that length of time?

A

m	r (dollars)
3	1,650
6	3,300
9	4,950

C

m	r (dollars)
550	1
1,100	2
1,650	3

B

m	r (dollars)
1	550
2	1,050
3	1,550

D

m	r (dollars)
2	1,000
4	2,000
6	3,000

26 Palmer participated in sports for 8 hours and drama for 5 hours during a period of 2 weeks. If Palmer continues participating in these activities at this rate, how many hours will he spend participating in them during 52 weeks?

F 13 hours

G 338 hours

H 8 hours

J 208 hours

27 Which equation best represents the relationship between x and y in the table below?

Input-Output Table

x	y
1	7
3	11
5	15
20	45

A $y = 7x$

B $y = 3x + 4$

C $y = 2x + 5$

D $y = x + 6$

GO ON

28 Nicole was on the decorating committee for a school dance. She made 5 different circular designs for the decorations. The committee agreed to use a design with a diameter of 19 inches. Which is closest to the circumference in inches of the design the committee chose?

F 13 in.

G 60 in.

H 95 in.

J 300 in.

29 To get ready for a race, Louise ran $1\frac{2}{3}$ miles on Monday, $2\frac{1}{4}$ miles on Tuesday, and $2\frac{5}{6}$ miles on Wednesday. Which procedure can Louise use to find the total number of miles she ran on these 3 days?

A Find the product of the sum of the whole numbers and the sum of the fractions

B Subtract the sum of the fractions from the sum of the whole numbers

C Find the quotient of the sum of the whole numbers and the sum of the fractions

D Add the sum of the whole numbers to the sum of the fractions

30 Triangle *VUW* is shown below.
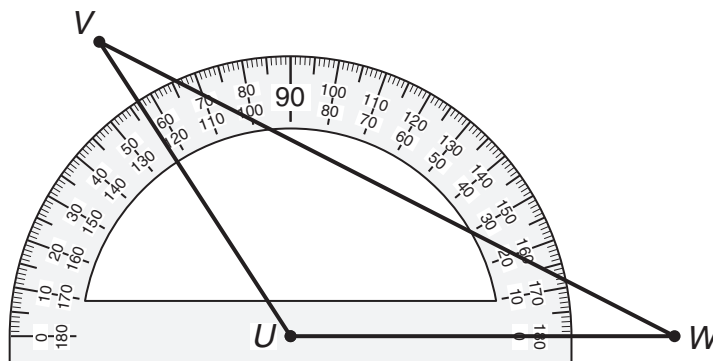
What is the measure of ∠*VUW* to the nearest degree?

F 57°

G 63°

H 123°

J 137°

31 Alex found the perimeter of a square to be 12 inches. Which of the following could be used to find l, the length of one edge of the square?

A $l = 4 \cdot 12$

B $l = 12 \div 4$

C $l = 4 + 12$

D $l = 12 - 4$

32 The table below shows the time it took 4 runners to finish a 100-meter dash.

Running Times

Runner	Time (seconds)
Bernice	12.03
Carlene	12.5
Dawn	12.33
Elaine	12.15

Which list shows the runners in order from fastest to slowest?

F Bernice, Elaine, Dawn, Carlene

G Dawn, Carlene, Elaine, Bernice

H Carlene, Bernice, Elaine, Dawn

J Bernice, Carlene, Dawn, Elaine

33 Ms. Meléndez needs to replace the batteries in 20 calculators. Each calculator uses 4 batteries. The batteries are sold in packages of 16. How many packages of batteries does Ms. Meléndez need to buy?

A 64

B 4

C 80

D 5

34 Fabian has organized $\frac{3}{5}$ of his baseball card collection. Which decimal represents the fraction of Fabian's collection he has organized?

F 0.4

G 0.6

H 0.35

J 0.12

35 The coordinate grid shows point L, the position of the rover *Spirit* when it landed on Mars, and the path it followed to point M. Point M shows the position of the rover after it traveled 100 meters.
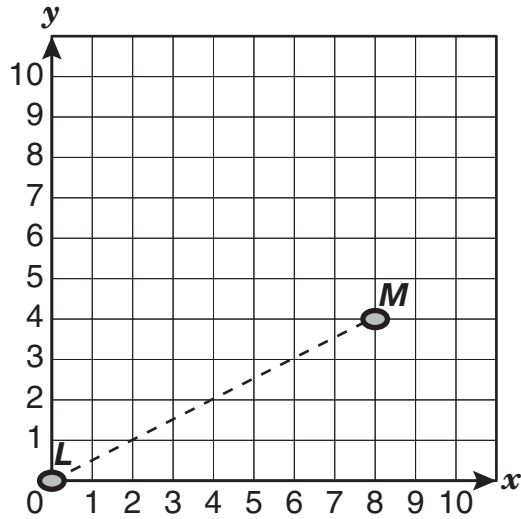
Which of the following best shows the position of the rover when it was halfway between point L and point M?

A (2, 4)

B (4, 8)

C (4, 2)

D (8, 4)

36 Zack attended a basketball camp for two weeks. His parents paid $50.00, which was $\frac{1}{3}$ the cost of attending the camp. Zack had saved money to pay the rest of the cost. Which equation can be used to find c, the entire cost of attending the camp?

F $c = 50 \cdot \dfrac{2}{3}$

G $c = 50 \cdot 3$

H $c = \dfrac{1}{(50 \cdot 3)}$

J $c = \dfrac{50}{3}$

37 The total length of all the songs on a CD Mohammed bought is about 80 minutes. Each song is between 4 and 6 minutes long. Which is a reasonable number of songs that could be on the CD?
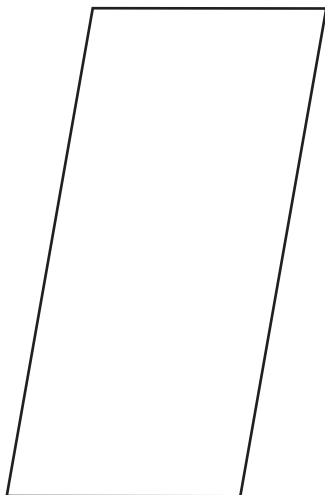
A   10

B   40

C   74

D   16

38 Look at the parallelogram shown below.

Which of the following could be the measures of the angles of the parallelogram?

F 120°, 60°, 120°, 120°

G 80°, 100°, 80°, 100°

H 90°, 90°, 120°, 60°

J 100°, 90°, 80°, 90°

39 A window is shown on the grid below.
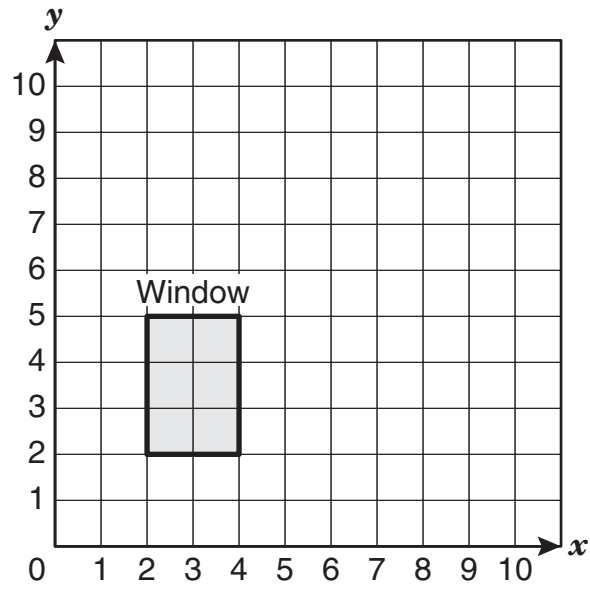
Which ordered pairs best represent the 4 vertices of the window?

A (4, 2), (2, 2), (5, 2), (4, 5)

B (2, 2), (2, 4), (5, 2), (5, 4)

C (2, 2), (4, 2), (4, 5), (2, 5)

D (4, 2), (5, 4), (5, 2), (2, 2)

40 Zane is reading a history book for a project. The graph below shows how many pages he read during a 5-day period.

Number of Pages Read

Which statement is best supported by the information in the graph?

F Zane read more pages on Monday and Wednesday than he did on Tuesday and Thursday, because 40 + 80 > 70 + 60.

G Zane read fewer pages on Tuesday and Wednesday than he did on Thursday and Friday, because 70 + 80 < 60 + 90.

H Zane read more pages on Thursday and Friday than he did on Tuesday and Wednesday, because 60 + 90 > 70 + 80.

J Zane read fewer pages on Wednesday and Thursday than he did on Tuesday and Friday, because 80 + 60 < 70 + 90.

41 The table below shows different types of volcanoes and the angles formed by their slopes.

Volcanoes

Type of Volcano	Angle of Slope
Cinder cone	Between 30 and 40 degrees
Composite cone	Up to 30 degrees
Shield	Less than 10 degrees

Based on the data in the table, which of the following statements is true about these volcanoes?

A All the volcanoes have obtuse angles of slope.

B All the volcanoes have acute angles of slope.

C The cinder cone has an obtuse angle of slope, and the composite cone and shield have acute angles of slope.

D The cinder cone has an acute angle of slope, and the composite cone and shield have obtuse angles of slope.

---

42 Three friends attended a football game and agreed to share the cost evenly. The total cost of the tickets was $51, the taxi ride to and from the game was $24, and snacks and drinks were $30. Which equation can be used to find c, the amount each friend should have paid?

F $c = (51 + 24 + 30) \cdot 3$

G $c = (51 + 24 + 30) \div 3$

H $c = 51 + 24 + 30 + 3$

J $c = 51 + 24 + 30 - 3$

43 Ted collected 22 pounds of aluminum cans. How many ounces of aluminum cans did he collect?
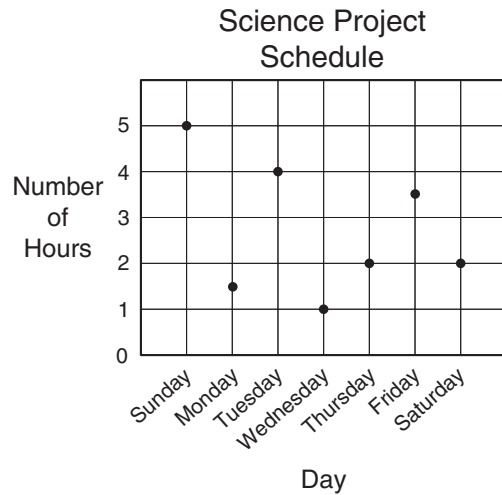
A 6 oz

B 38 oz

C 352 oz

D 220 oz

44 Look at the figure shown below.
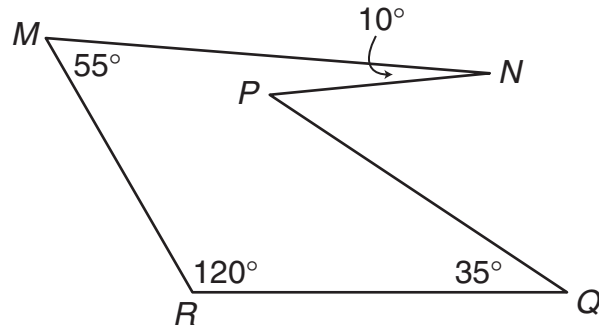
Which of the following angles in the figure is obtuse?

F ∠*NMR*

G ∠*MRQ*

H ∠*PQR*

J ∠*MNP*

45 Terrance created a graph to show the number of hours he plans to work on his science project each day next week.

Science Project
Schedule

Day

Which table best represents the same information as the graph?

Science Project
Schedule

A

Day	Number of Hours
Sunday	5
Monday	2
Tuesday	4
Wednesday	1
Thursday	2
Friday	4
Saturday	2

Science Project
Schedule

C

Day	Number of Hours
Sunday	2.0
Monday	3.5
Tuesday	2.0
Wednesday	1.0
Thursday	4.0
Friday	1.5
Saturday	5.0

Science Project
Schedule

B

Day	Number of Hours
Sunday	1.5
Monday	5
Tuesday	4
Wednesday	1
Thursday	2
Friday	3.5
Saturday	2

Science Project
Schedule

D

Day	Number of Hours
Sunday	5.0
Monday	1.5
Tuesday	4.0
Wednesday	1.0
Thursday	2.0
Friday	3.5
Saturday	2.0

46 Look at Set V and Set W shown below.

Set V = {1, 3, 5, 7, 9, 11, . . .}

Set W = {3, 6, 9, 12, 15, 18, . . .}

Which of the following numbers could belong to both Set V and Set W?

F   35

G   25

H   21

J   31

Texas Assessment of Knowledge and Skills - Answer Key

Grade: 06
Subject: Mathematics
Administration: April 2006

Item Number	Correct Answer	Objective Measured	Student Expectations
01	C	05	6.10 (C)
02	F	02	6.5 (A)
03	C	01	6.1 (D)
04	J	01	6.2 (C)
05	B	06	6.11 (B)
06	H	05	6.9 (A)
07	B	02	6.3 (A)
08	J	06	6.11 (A)
09	C	03	6.6 (B)
10	G	05	6.10 (B)
11	A	01	6.2 (C)
12	G	06	6.11 (C)
13	D	03	6.6 (C)
14	G	01	6.1 (C)
15	D	01	6.1 (E)
16	G	02	6.3 (B)
17	C	01	6.2 (D)
18	J	02	6.3 (B)
19	B	06	6.11 (C)
20	G	05	6.10 (D)
21	11.81	01	6.2 (B)
22	H	06	6.12 (A)
23	B	05	6.9 (B)
24	G	04	6.8 (A)
25	A	02	6.4 (A)
26	G	02	6.3 (C)
27	C	02	6.4 (A)
28	G	04	6.8 (B)
29	D	01	6.2 (A)
30	H	04	6.8 (C)
31	B	02	6.4 (B)
32	F	01	6.1 (A)
33	D	06	6.11 (A)
34	G	01	6.1 (B)
35	C	03	6.7 (A)
36	G	02	6.5 (A)
37	D	04	6.8 (A)
38	G	03	6.6 (B)
39	C	03	6.7 (A)
40	J	06	6.13 (B)
41	B	03	6.6 (A)
42	G	06	6.12 (A)
43	C	04	6.8 (D)
44	G	03	6.6 (A)
45	D	05	6.10 (A)
46	H	06	6.13 (A)