M1:

Malfunction at MIT:

Professor Faraday's Anti-ignoramus
diagnostic mechanism

MATHEMATICS TEST

60 Minutes—60 Questions

DIRECTIONS: Solve each problem, choose the correct answer, and then fill in the corresponding oval on your answer document.

Do not linger over problems that take too much time. Solve as many as you can; then return to the others in the time you have left for this test.

You are permitted to use a calculator on this test. You may use your calculator for any problems you choose, but some of the problems may best be done without using a calculator.

Note: Unless otherwise stated, all of the following should be assumed.

1. Illustrative figures are NOT necessarily drawn to scale.
2. Geometric figures lie in a plane.
3. The word *line* indicates a straight line.
4. The word *average* indicates arithmetic mean.

DO YOUR FIGURING HERE.

1. A car was purchased 4 years ago for $26,200. The current value of the car is $17,500. What was the car's average decrease in value per year?

   A. $2,175
   B. $2,900
   C. $4,350
   D. $4,375
   E. $6,550

2. For what value of x is $6x - 3 = 4x + 7$ true?

   F. $\frac{2}{5}$

   G. $\frac{7}{8}$

   H. 1

   J. 2

   K. 5

3. Which of the following integers is NOT a factor of 132 ?

   A. 6
   B. 8
   C. 11
   D. 12
   E. 33

4. A vending machine only accepts quarters ($0.25) and nickels ($0.05). When the machine was emptied Friday afternoon, 325 coins were counted and had a value of $56.25. Which of the following systems of equations, when solved, gives the number of quarters, q, and the number of nickels, n ?

   F. $q + n = 325$ and $0.25q + 0.05n = 56.25$
   G. $q + n = 325$ and $0.25q + 0.50n = 56.25$
   H. $q + n = 325$ and $25q + 5n = 56.25$
   J. $q + n = 56.25$ and $0.25q + 0.05n = 325$
   K. $q + n = 56.25$ and $25q + 5n = 325$
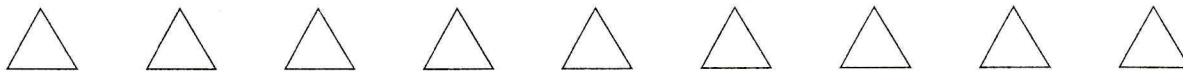
DO YOUR FIGURING HERE.

5. Carlotta is helping her grandfather center a large framed picture on his living room wall. As shown in the figure below, the rectangular wall is 24 feet long, and the rectangular framed picture is 4.5 feet high and 7.5 feet long. The left edge of the frame will be x feet from the left edge of the wall, and the right edge of the frame will be x feet from the right edge of the wall. What is the value of x ?

A. 8.25
B. 9.75
C. 12
D. 16.5
E. 19.5
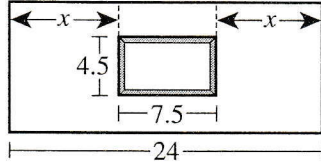
6. In $\triangle ABC$, the sum of the measures of $\angle A$ and $\angle B$ is $57°$. What is the measure of $\angle C$?

F. 33°
G. 57°
H. 66°
J. 114°
K. 123°

7. A square and a rectangle have the same area. The length of the rectangle is 32 centimeters, and the width of the rectangle is 2 centimeters. What is the length, in centimeters, of a side of the square?

A. $2\sqrt{17}$
B. 8
C. 17
D. 64
E. 68

8. As a motivational speaker, Bree speaks at school assemblies, charging a school district for her travel costs and a fixed amount per assembly. Bree used the equation $C = 50a + 1{,}500$ to determine the charge of C dollars to speak at a assemblies in the Escambia City School District. Bree charged the district $4,250 to speak at school assemblies. How many assemblies did Bree speak at in this district?

F. 30
G. 54
H. 55
J. 85
K. 115

9. Let a and b be positive prime numbers. Which of the following numbers *must* be a factor of both a and b ?

A. 0
B. 1
C. a
D. b
E. ab

10. What is the value of $80 - 5(x^2 - y) + y$ when $x = 4$ and $y = 6$?

F.   0
G.   24
H.   36
J.   76
K. 756

11. At the Winter Weather Store, the price of 1 hat is $12 and the price of 1 scarf is $14. Jovon spent $128 to buy 10 items—a combination of hats and scarves. How many hats did he buy?
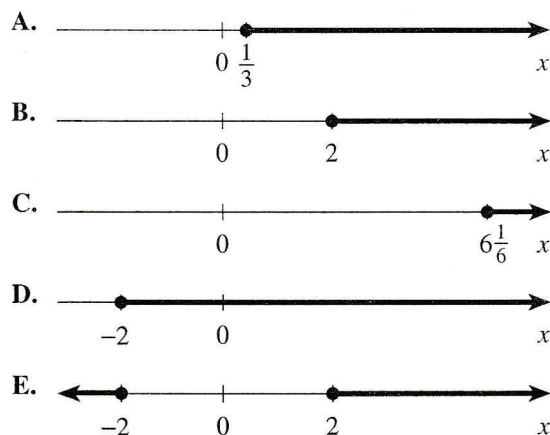
A. 1
B. 4
C. 5
D. 6
E. 8

12. Square *ABEF* and parallelogram *ACDG* are shown in the figure below. Points *E* and *F* are on $\overline{DG}$, *B* is on $\overline{AC}$, and the lengths given are in inches. What is the ratio of the area of *ABEF* to the area of *ACDG* ?
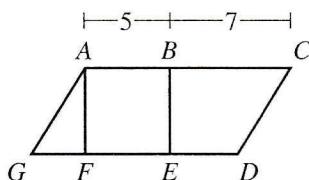
F.   1:12
G.   1:24
H.   5:12
J.   12:1
K.   12:5

13. Which of the following graphs shows the solution set for the inequality $6x - 5 \geq 7$?

A.

B.

C.

D.

E.

14. The length of a rectangle is 5 inches longer than the width. The perimeter of the rectangle is 60 inches. What is the width of the rectangle, in inches?

F.   12
G.   12.5
H.   24
J.   25
K.   27.5

DO YOUR FIGURING HERE.

Use the following information to answer questions 15–17.

Miriam conducted a survey of the students in her 8th-grade class to determine which of 7 Olympic sports were the most popular. Each student who responded to the survey selected 1 Olympic sport as his or her favorite. The circle graph below shows the number of students who selected each of the 7 Olympic sports. A total of 40 students responded to the survey.
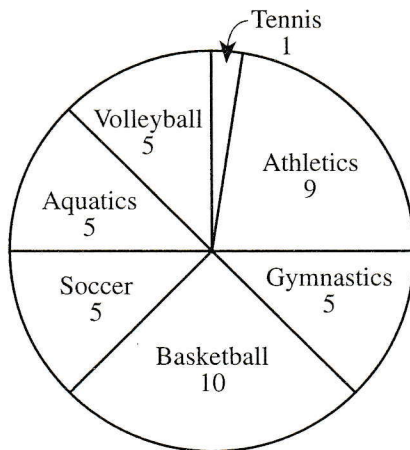

15. To the nearest 0.1%, what percent of the students who responded to the survey selected Basketball?

- **A.** 10.0%
- **B.** 12.5%
- **C.** 22.5%
- **D.** 25.0%
- **E.** 30.0%

16. In this survey, what is the ratio of the number of students who selected Athletics to the number of students who selected Soccer?

- **F.** 5:9
- **G.** 5:14
- **H.** 9:5
- **J.** 9:14
- **K.** 9:40

17. In the circle graph, what is the angle measure of the sector that represents the number of students who responded to the survey who selected Tennis?

- **A.** 1°
- **B.** $4\frac{1}{2}°$
- **C.** 5°
- **D.** 9°
- **E.** 10°
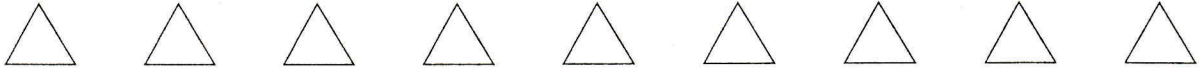
18. A spinner dial from a game is shown in the figure below. Each numbered sector of the circle has the same central angle measure. If the arrow on the spinner dial is spun randomly, what is the probability the arrow will point to a sector whose number is both a multiple of 3 and a multiple of 4 ?

F. $\frac{3}{8}$

G. $\frac{1}{2}$

H. $\frac{5}{8}$

J. $\frac{3}{4}$

K. $\frac{7}{8}$
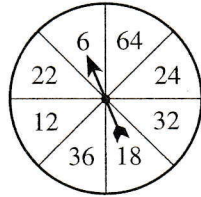
19. The counselors at Lakewood High School interviewed 200 students to determine placement in 3 different honors courses: Math, Chemistry, and Literature. The numbers of these students placed in these honors courses are shown in the Venn diagram below. Of these 200 students, 10% were placed into all 3 honors courses, and 35% were placed into exactly 2 honors courses. What percent of the students were placed into exactly 1 honors course?

Lakewood High School
Honors Course Placement
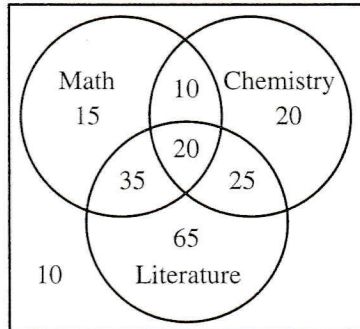
A. 7.5%
B. 10%
C. 32.5%
D. 45%
E. 50%

20. One sign flashes every 4 seconds, and another sign flashes every 14 seconds. At a certain instant, the 2 signs flash at the same time. How many seconds elapse until the 2 signs next flash at the same time?

F. 9
G. 10
H. 18
J. 28
K. 56

21. Which of the following transformations shifts all points graphed in the standard (x,y) coordinate plane down 5 coordinate units?

A. $(x,y) \rightarrow (x, y - 5)$
B. $(x,y) \rightarrow (x, y + 5)$
C. $(x,y) \rightarrow (x, -5y)$
D. $(x,y) \rightarrow (x - 5, y)$
E. $(x,y) \rightarrow (x + 5, y)$

22. For $\overleftrightarrow{AC}$ shown below, B is on $\overline{AC}$, the length of $\overline{AB}$ is 12 cm, and the length of $\overline{BC}$ is 20 cm. What is the distance, in centimeters, between C and the midpoint of $\overline{AB}$?

- **F.** 16
- **G.** 20
- **H.** 22
- **J.** 26
- **K.** 32

DO YOUR FIGURING HERE.

23. Which of the following expressions is a factored form of $x^2 - 5x + 6$?

- **A.** $(x - 3)(x - 2)$
- **B.** $(x - 3)(x + 2)$
- **C.** $(x - 5)(x - 1)$
- **D.** $(x - 6)(x + 1)$
- **E.** $(x + 6)(x - 1)$

24. The sum of $(-2x^2 + 2x + 8)$ and which of the following polynomials is $(5x^2 + 3)$?

- **F.** $3x^2 + 2x + 11$
- **G.** $-7x^2 + 2x + 5$
- **H.** $7x^2 - 2x - 5$
- **J.** $-7x^2 + 5$
- **K.** $7x^2 - 5$

25. The expression $\dfrac{3 + \frac{1}{9}}{1 + \frac{1}{18}}$ is equal to:

- **A.** $1\frac{9}{19}$
- **B.** 2
- **C.** $2\frac{1}{2}$
- **D.** $2\frac{18}{19}$
- **E.** 5

26. Ava starts with a long list of numbers, each of which she must multiply by $\frac{4}{3}$ and then divide by $\frac{1}{6}$. She could get the same results by multiplying each number on her list by which of the following numbers?

- **F.** $\frac{1}{4}$
- **G.** $\frac{3}{4}$
- **H.** 4
- **J.** 6
- **K.** 8
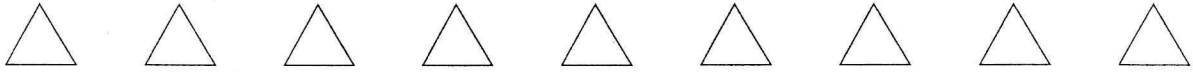
27. When $6x = 2y - 18$ is graphed in the standard (x,y) coordinate plane, what is the y-intercept?

   A. 2
   B. 3
   C. 4
   D. 6
   E. 9

28. Given functions $f(x) = x - 5$ and $g(x) = 5 - x^2$, what is $f(g(-4))$?
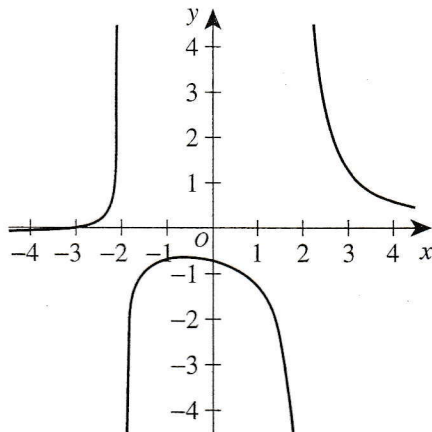
   F. -76
   G. -20
   H. -16
   J.   16
   K.   86

29. For right triangle $\triangle ABC$ shown below, which of the following expressions has a value that is equal to $\cos A$?

   A. $\sin A$
   B. $\sin B$
   C. $\cos B$
   D. $\tan A$
   E. $\tan B$
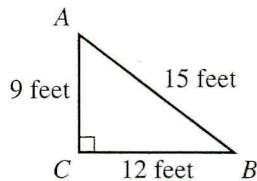
30. The equation $y = \dfrac{x+3}{x^2-4}$ is graphed in the standard (x,y) coordinate plane below. No point on the graph has which of the following x-coordinates?

   F. -3
   G. -2
   H. -1
   J.   0
   K.   1

31. The Wilson family sold a shipment of walnuts to a farming cooperative for $210 at the rate of $0.03 per pound. If their shipment averaged 12 walnuts per pound, which of the following is closest to the total number of walnuts in the shipment?

   A.   580
   B.   840
   C.   7,000
   D.   7,600
   E. 84,000

DO YOUR FIGURING HERE.

DO YOUR FIGURING HERE.

32. Over a 7-day period at Phil's Fitness, the average attendance of the slowest day and the busiest day was 247 members. The average of the other 5 days was also 247 members. The total attendance for the 7-day period at Phil's Fitness was how many members?

   F.   247
   G.   494
   H. 1,235
   J. 1,729
   K. 2,470

33. Which of the following values is a zero of $f(x) = 2x^3 - 5x^2 - 12x$?

   A.   3

   B.   2

   C. $-\dfrac{3}{2}$

   D. -4

   E. -6

34. The sum of a sequence of consecutive odd numbers, where the smallest term is 1, is always a perfect square. For example, $1 + 3 = 2^2$ and $1 + 3 + 5 + 7 = 4^2$. One of the sequences described above has a sum of 144. What is the largest odd number in the sequence?

   F. 11
   G. 13
   H. 15
   J. 23
   K. 73

35. What is the slope of the line that passes through the points $(-2,5)$ and $(3,-4)$ in the standard (x,y) coordinate plane?

   A.   1

   B. $-\dfrac{1}{5}$

   C. $-\dfrac{5}{9}$

   D. -1

   E. $-\dfrac{9}{5}$

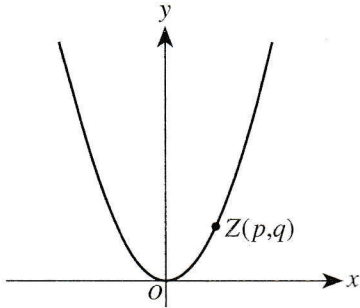**36.** Among the following rational numbers, which has the greatest value?

   F. 0.34
   G. $0.3\overline{4}$
   H. $0.\overline{34}$
   J. 0.343
   K. 0.3409

DO YOUR FIGURING HERE.

Use the following information to answer questions 37–39.

A parabola with equation $y = ax^2$ is graphed in the standard (x,y) coordinate plane below. Point $Z(p,q)$ lies on the parabola.


37. For any point $Z(p,q)$ on the parabola, which of the following points *must* also be on the parabola?

   A. $(-p,-q)$
   B. $(-p, q)$
   C. $(p,-q)$
   D. (p^2, q^2)
   E. (q, p)

38. What is the value of a if the coordinates of Z are (5, 100) ?

   F. $\dfrac{1}{20}$
   G. 2
   H. 4
   J. 10
   K. 20

39. Suppose that the parabola is rotated clockwise (↻) by 90° about the origin. Which of the following is an equation for the parabola that results from this rotation?

   A. $x = -ay^2$
   B. $x = ay^2$
   C. $y = a\sqrt{x}$
   D. $y = -ax^2$
   E. $y = ax^2 + 90$

40. For all $k > 0$, $|x| = |y| = -k$ has how many (x,y) solutions?

   F. 0
   G. 1
   H. 2
   J. 3
   K. 4

41. A Ferris wheel is turning at a constant speed during 1 of its rotations. Let t represent the time that has elapsed since the wheel started turning and let h represent the height above ground level of a certain seat on the wheel. The seat is at its minimum height at $t = a$ seconds and is at its maximum height at $t = b$ seconds. One of the following graphs represents the relationship between t and h during this rotation. Which one?

A.

B.

C.

D.

E.
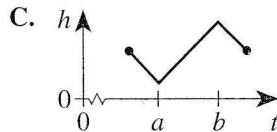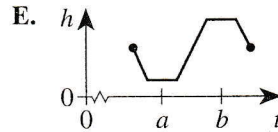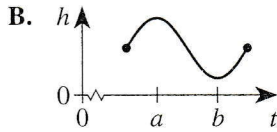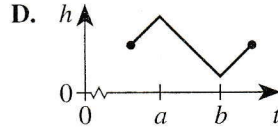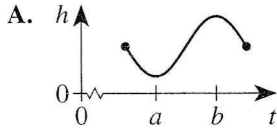
42. In the figure below, X and Z are on line m, and Y is on line l. The exterior angle to $\triangle XYZ$ at Z measures $160°$. One of the following statements gives sufficient additional information to find the measure of $\angle b$. Which one?
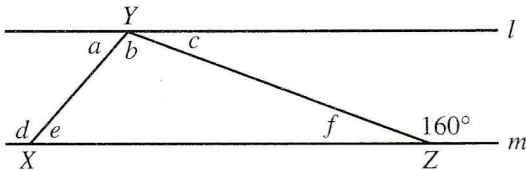

F. Line l is parallel to line m.
G. The measure of $\angle d$ is $130°$.
H. The measure of $\angle c$ is equal to the measure of $\angle f$.
J. The measure of $\angle a$ is greater than the measure of $\angle c$.
K. The sum of the measures of $\angle b$, $\angle e$, and $\angle f$ is $180°$.

43. In the figure below, C lies in the interior of the acute angle $\angle ABD$, and D lies in the interior of the acute angle $\angle CBE$. The measure of $\angle ABE$ is $75°$, the measure of $\angle ABC$ is $25°$, and the measure of $\angle DBE$ is $35°$. What is the measure of $\angle ABD$?
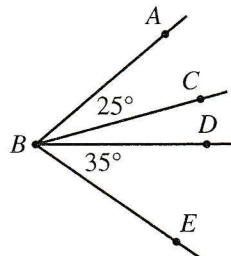

A. 15°
B. 30°
C. 40°
D. 50°
E. 60°
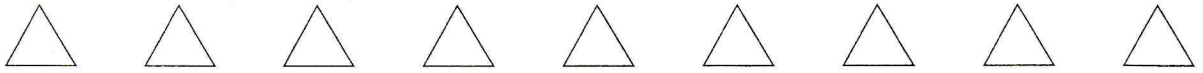
44. Li is standing at point L on the north side of the small canyon shown in the figure below. As measured by line of sight, Li is 2 miles from an observation tower at T, and she is 3 miles from a scenic overlook at S. Li, the observation tower, and the scenic overlook are all at the same elevation. The measure of $\angle S$ is 28°. Which of the following equations, when solved, gives the measure of $\angle T$?

(Note: For a triangle with sides of length a, b, and c that are opposite $\angle A$, $\angle B$, and $\angle C$, respectively, $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$.)
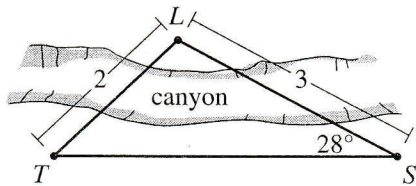
F. $\dfrac{\sin T}{3} = \dfrac{\sin 28°}{2}$

G. $\dfrac{\sin T}{3} = 2$

H. $\dfrac{\sin T}{2} = \dfrac{\sin 28°}{3}$

J. $\dfrac{\sin 28°}{T} = \dfrac{2}{3}$

K. $\sin T - \sin 28° = 3 - 2$

45. Mr. Green is buying mulch for his triangular-shaped garden shown below. When the mulch is uniformly spread 2 inches deep, each bag of mulch will cover 12 square feet. Mr. Green plans to uniformly spread his mulch 3 inches deep. Which of the following is closest to the number of bags of mulch Mr. Green will need for his garden?
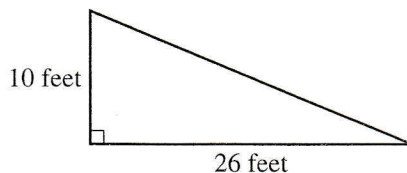
A. 11
B. 17
C. 22
D. 24
E. 33

46. A child's dose of medicine is often based on an adult's dose of medicine. For some medicines, Cowling's rule, $d = \frac{D(a+1)}{24}$, relates the dose of d milligrams for a child of age a years to the adult dose of D milligrams. Which of the following expressions gives a in terms of D and d ?

F. $d - 1 - \frac{D}{24}$

G. $\frac{dD}{24} + 1$

H. $\frac{24d}{D} - 1$

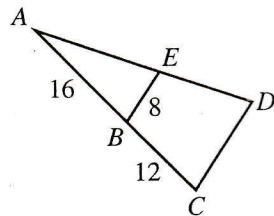**J.** $\frac{24d}{D} + 1$

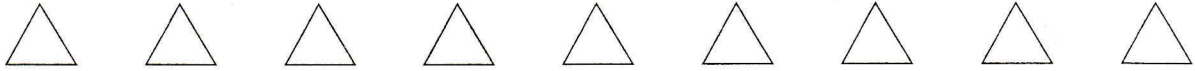**K.** $\frac{24d - 1}{D}$

DO YOUR FIGURING HERE.

47. For all $x > 0$, which of the following expressions is equivalent to $\log\left((2x)^{\frac{1}{2}}\right)$?

A. $\log x$

B. $\log 1 + \log \frac{x}{2}$

C. $\log 2 + \frac{1}{2} \log x$

D. $\frac{1}{2} \log 2 + \frac{1}{2} \log x$

E. $\frac{1}{2}(\log 2)(\log x)$

48. In $\triangle ACD$ shown below, $\overline{BE}$ is parallel to $\overline{CD}$, and the given lengths are in feet. Given that CD denotes the length, in feet, of $\overline{CD}$, which of the following proportions involving CD *must* be true?

F. $\frac{CD}{8} = \frac{16}{28}$

G. $\frac{CD}{12} = \frac{8}{16}$

H. $\frac{CD}{28} = \frac{8}{16}$

J. $\frac{CD}{28} = \frac{16}{8}$

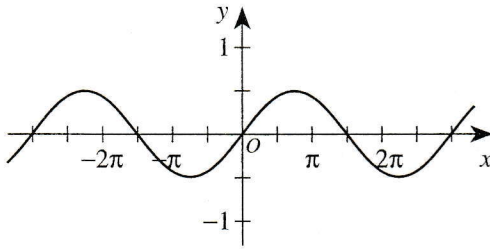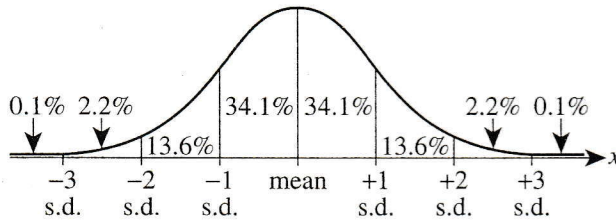**K.** $\frac{CD}{28} = \frac{8}{\sqrt{320}}$

DO YOUR FIGURING HERE.

49. The graph of $y = a \sin bx$ is shown below for certain positive values of a and b. One of the following values is equal to a. Which one?

A. $\dfrac{1}{2}$

B. $\dfrac{2}{3}$

C. $\dfrac{3}{2}$

D. 2

E. 3

50. The graph below illustrates the normal distribution curve. The percent of the data that falls within each standard deviation from the mean is given to the nearest 0.1%.

Suppose that the heights of men in a certain population are normally distributed with a mean of 69.0 inches and a standard deviation of 2.7 inches. To the nearest 0.1%, what percent of men in the population are at least 74.4 inches tall?

F. 2.3%
G. 2.7%
H. 4.6%
J. 47.7%
K. 54.4%

51. Circles with centers A, B, and C, respectively, are mutually tangent, as shown below, and have radii of lengths a, b, and c, respectively. The lengths of $\overline{AB}$, $\overline{BC}$, and $\overline{AC}$ are 13 inches, 15 inches, and 26 inches, respectively. What is the value of $a + b + c$?

(Note: The figure is not drawn to scale.)

A. 18
B. 24
C. 27
D. 40
E. 54

DO YOUR FIGURING HERE.
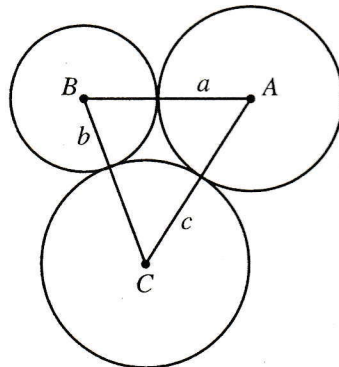
52. Which of the following sets of 3 lengths, in decimeters, are the side lengths of an obtuse triangle?

(Note: An obtuse triangle has 1 angle whose measure is greater than 90° and less than 180°.)

F. {4, 4, 5}
G. {5, 12, 13}
H. {6, 8, 10}
J. {7, 10, 12}
K. {8, 11, 16}

53. Angle A measures $\frac{9}{2}\pi$ radians from its initial side to its terminal side. Angle B has the same initial side and terminal side as Angle A. Which of the following measures could be that of Angle B ?

A.   5°
B.   14°
C.   25°
D.   90°
**E.**   180°

54. A polynomial in x has m nonzero terms. Another polynomial in x has n nonzero terms, where $m < n$. These polynomials are multiplied and all like terms are combined. The resulting polynomial in x has a maximum of how many nonzero terms?

F. n

G. $\frac{m+n}{2}$

H. $m + n$

J. $\frac{mn}{2}$

K. mn

27

GO ON TO THE NEXT PAGE.

55. Hannah is building a fence along 3 sides of a rectangle, leaving 1 of the short sides unfenced. The fence has a post at each corner. The rectangle is 30 feet by 48 feet, measured from the centers of the corner posts. As shown in the figure below, adjacent posts of the fence are set every 6 feet, and there are 12 wooden slats between each pair of posts. How many wooden slats will Hannah use for the fence?
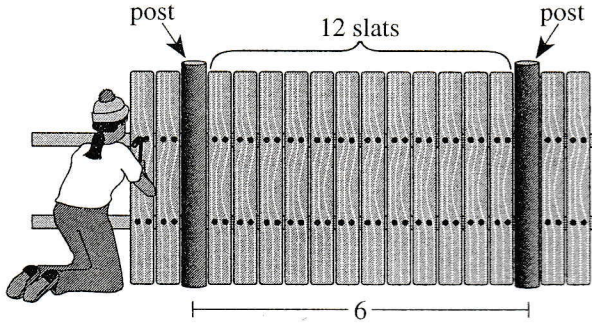
A. 72
B. 156
C. 240
D. 252
E. 312

56. Which of the following graphs best represents the system of inequalities below?

$$10 \le x \le 40$$
$$0 \le y \le 30$$
$$y \ge -\frac{1}{3}x + 10$$
$$y \le -x + 45$$

F.

J.

G.

K.

H.
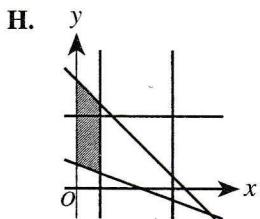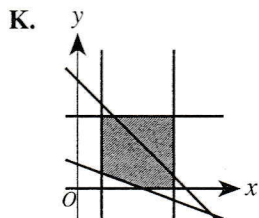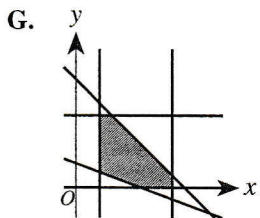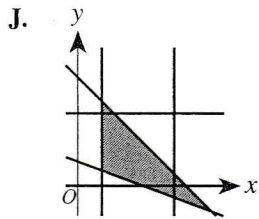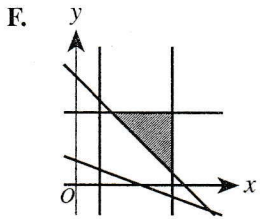
57. In the diagram below, chord $\overline{EF}$ is parallel to diameter $\overline{AB}$. The length of $\overline{EF}$ is 10 inches and the length of $\overline{AB}$ is 14 inches. What is the distance, in inches, from C, the center of the circle, to D, the midpoint of $\overline{EF}$?

A. 4

B. $4\frac{2}{3}$

C. $2\sqrt{6}$

D. 5

E. $4\sqrt{6}$

58. The entire graph of $y = f(x)$ is shown in the standard (x,y) coordinate plane below. One of the following sets is the domain of f. Which set?
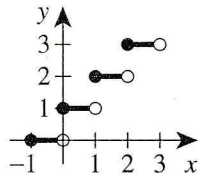
F. $\{0, 1, 2, 3\}$

G. $\{-1, 0, 1, 2\}$

H. $\{-1, 0, 1, 2, 3\}$

J. $\{x \mid 0 \leq x \leq 3\}$

K. $\{x \mid -1 \leq x < 3\}$

59. Let the values of real numbers a, b, and c be restricted by the 2 conditions given below.
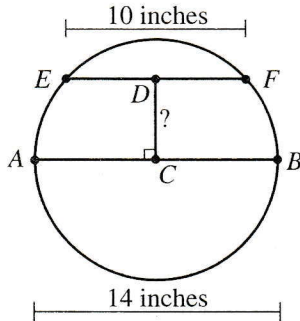
1. a is 5 less than b
2. b is at least 3 more than c

Which of the following inequalities expresses the same relationship between a and c as given by the 2 conditions?

A. $a \geq c - 2$
B. $a \geq c + 2$
C. $a \geq c + 3$
D. $a \geq c - 8$
E. $a \geq c + 8$

60. Let m and n be nonzero real numbers such that $2^{n+1} = 2m$. Which of the following is an expression for 2^{n+3} in terms of m ?

F. $\dfrac{1}{6m^3}$

G. $\dfrac{1}{4m}$

H. m^3

J. $4m^2$

K. $8m$

END OF TEST 2

STOP! DO NOT TURN THE PAGE UNTIL TOLD TO DO SO.

DO NOT RETURN TO THE PREVIOUS TEST.

Test 71C Math

1. Pre-algebra-money word problem **A**
2. Algebra **K**
3. Pre-algebra **B**
4. Pre-algebra-money word problem **F**
5. Geometry- word problem **A**
6. Geometry- lines and angles **K**
7. Geometry- word problem **B**
8. Pre-algebra-word problem **H**
9. Pre-algebra/ WIZARD MATH! **B**
10. Algebra **H**
11. Pre-algebra-money word problem **D**
12. Geometry- lines and angles **H**
13. Pre-algebra inequalities **B**
14. Geometry **G**
15. CLUSTER BLOCK- Pre algebra **D**
16. CLUSTER BLOCK- Pre algebra **H**
17. CLUSTER BLOCK- Pre algebra **D**
18. Pre-algebra-probability word problems **F**
19. Pre-algebra-Venn diagram word problems **E**
20. Pre-algebra- word problems **J**
21. Coordinate geometry **A**
22. Geometry- lines and angles **J**
23. Algebra **A**
24. Algebra **H**
25. Pre-algebra **D**
26. Pre-algebra- word problem **K**
27. Coordinate geometry **E**
28. Algebra **H**
29. Geometry **B**
30. Coordinate geometry **G**
31. Pre-algebra-money word problem **E**
32. Pre-algebra-money word problem **J**
33. Algebra **C**

34. Pre-algebra- sequencing **J**
35. Coordinate geometry **E**
36. Pre-algebra **G**
37. CLUSTER BLOCK- Coordinate geometry **B**
38. CL CLUSTER BLOCK- Coordinate geometry **H**
39. USTER BLOCK- geometry **B**
40. Algebra/WIZARD MATH **F**
41. Pre-algebra- word problem **A**
42. Geometry-lines and angles **G**
43. Geometry-lines and angles **C**
44. Trigonometry **F**
45. Geometry **B**
46. Pre-algebra- word problem/WIZARD MATH **H**
47. Integrated math/weird/LOGS **D**
48. Geometry **H**
49. Trigonometry **A**
50. Pre-algebra- word problem **F**
51. Geometry **C**
52. Geometry **K**
53. Geometry **D**
54. Pre-algebra- word problem/WIZARD MATH K
55. Geometry **D**
56. Pre-algebra inequalities **G**
57. Geometry **C**
58. Coordinate Geometry **K**
59. Pre-algebra inequalities/ WIZARD MATH **A**
60. Pre-algebra inequalities/ WIZARD MATH **K**

Explanation of Procedures Used to Obtain
Scale Scores from Raw Scores

On each of the four tests on which you marked any responses, the total number of correct responses yields a raw score. Use the table below to convert your raw scores to scale scores. For each test, locate and circle your raw score or the range of raw scores that includes it in the table below. Then, read across to either outside column of the table and circle the scale score that corresponds to that raw score. As you determine your scale scores, enter them in the blanks provided on the right. The highest possible scale score for each test is 36. The lowest possible scale score for any test on which you marked any responses is 1.

Next, compute the Composite score by averaging the four scale scores. To do this, add your four scale scores and divide the sum by 4. If the resulting number ends in a fraction, round it off to the nearest whole number. (Round down any fraction less than one-half; round up any fraction that is one-half or more.) Enter this number in the blank. This is your Composite score. The highest possible Composite score is 36. The lowest possible Composite score is 1.

ACT Test 71C   **Your Scale Score**

English   _____

Mathematics   _____

Reading   _____

Science   _____

Sum of scores   _____

Composite score (sum ÷ 4)   _____

NOTE: If you left a test completely blank and marked no items, do not list a scale score for that test. If any test was completely blank, do not calculate a Composite score.

| Scale Score | Raw Scores | | | | Scale Score |
	Test 1 English	Test 2 Mathematics	Test 3 Reading	Test 4 Science	
36	75	59-60	40	38-40	36
35	73-74	57-58	39	37	35
34	72	55-56	38	36	34
33	71	54	37	35	33
32	70	53	36	34	32
31	69	52	35	33	31
30	67-68	51	33-34	—	30
29	66	49-50	32	32	29
28	65	47-48	31	31	28
27	63-64	45-46	30	29-30	27
26	61-62	43-44	29	28	26
25	59-60	40-42	28	26-27	25
24	56-58	38-39	27	25	24
23	54-55	35-37	25-26	23-24	23
22	51-53	33-34	24	22	22
21	48-50	32	22-23	20-21	21
20	45-47	30-31	20-21	19	20
19	42-44	29	19	17-18	19
18	40-41	26-28	18	16	18
17	38-39	23-25	16-17	15	17
16	36-37	18-22	15	14	16
15	33-35	14-17	14	13	15
14	30-32	11-13	13	12	14
13	28-29	9-10	11-12	11	13
12	26-27	7-8	10	10	12
11	23-25	6	8-9	9	11
10	21-22	5	7	7-8	10
9	18-20	4	6	6	9
8	15-17	—	5	5	8
7	13-14	3	4	4	7
6	10-12	2	—	3	6
5	8-9	—	3	—	5
4	6-7	1	2	2	4
3	4-5	—	—	1	3
2	2-3	—	1	—	2
1	0-1	0	0	0	1

07/15/13

Form 71C

ACT ASSESSMENT TEST INFORMATION RELEASE REPORT
TEST DATE = 06/13   TEST FORM = 71C   TEST CENTER = 17879

ITEM NUMBER	1 1111111112 1234567890 1234567890	222222223 1234567890	3333333334 1234567890	444444445 1234567890	555555556 1234567890	666666667 1234567890	77777 12345

ENGLISH
CORRECT ANSWER   BFDHBFBGDF CJDFAJBFBF CJCGDJAHBJ CFCFBFDGDH BJCHDJDFCJ BFDGAHCHAF CGBFDGCFCF CGCGA
YOUR ANSWER
SUBSCORE

MATHEMATICS
CORRECT ANSWER   AKBFAKBHBH DHBGDHDFEJ AJAHDKEHBG EJCJEGBHBF AGCFBHDHAF CKDKDGCKAK
YOUR ANSWER
SUBSCORE

READING
CORRECT ANSWER   CHAHDHBHBG AFCGCJAJBF AHAGAJAGCJ DHDFAJBGCJ
YOUR ANSWER
SUBSCORE

SCIENCE
CORRECT ANSWER   AGAHDJDHCF DFCGCGAFAG CGDFDGDGAH AJBFCGCHBJ
YOUR ANSWER

1st Row: Correct responses to the items on the ACT tests.

2nd Row: Your Responses:
A plus (+) indicates your response was correct.
A letter (A through K) is the response you chose,
if your answer was incorrect.
A dash (-) indicates you omitted the item.
An asterisk (*) indicates you gridded more than
one response.

3rd Row: If the test includes subscores, one of the letters below
indicates the category to which each item belongs:

English: U = Usage/Mechanics
          R = Rhetorical Skills
Math: A = Pre-Algebra/Elementary Algebra
          G = Intermediate Algebra/Coordinate Geometry
          T = Plane Geometry/Trigonometry
Reading: S = Social Studies/Sciences
          L = Arts/Language

PLUS WRITING TEST FORM: 18L
1st RATER: 04   2nd RATER: 04