

## SECTION 1

### 1. TENDENCY

- (A) quick look
- (B) myth
- (C) gem
- (D) inclination
- (E) dilemma

### 2. KILN

- (A) flurry
- (B) hag
- (C) trench
- (D) solitude
- (E) oven

### 3. BROADMINDED

- (A) floppy
- (B) insane
- (C) strange
- (D) tolerant
- (E) frequent

### 4. VACANT:

- (A) varied
- (B) dreary
- (C) rented
- (D) huge
- (E) stark

### 5. AFFIRMATIVE :

- (A) relevant
- (B) ancient
- (C) unwise
- (D) negative
- (E) positive

### 6. BOUNDARY :

- (A) limit
- (B) map
- (C) seam
- (D) hovel
- (E) ceiling

### 7. DOZE:

- (A) refresh
- (B) bore
- (C) ignore
- (D) sleep
- (E) graze

### 8. AMBIGUOUS:

- (A) adhere
- (B) aspire
- (C) unclear
- (D) certain
- (E) afflict

### 9. RANSACK:

- (A) denounce publicly
- (B) cover completely
- (C) make secure

(D) act quickly

(E) search thoroughly

10. ENDEAVOR:

(A) ability

(B) expectation

(C) attempt

(D) tack

(E) necessity

11. TUMULT:

(A) blockage

(B) annoyance

(C) disagreement

(D) commotion

(E) insignificance

12. FABRICATE:

(A) decorate

(B) falsify

(C) deter

(D) fasten

(E) stitch

13. RESTRICT:

(A) aide

(B) confine

(C) increase

(D) contradict

(E) discredit

14. OBSTINATE:

(A) thwart

(B) insightful

(C) successful

(D) elated

(E) satisfied

15. OBDURATE:

(A) cerebral

(B) sensitive

(C) pretentious

(D) enervated

(E) stubborn

16. REINFORCE:

(A) strengthen

(B) preserve

(C) convey

(D) overcome

(E) disregard

17. MOMENTOUS:

(A) unexpected

(B) advantageous

(C) catastrophic

(D) ambiguous

(E) critical

18. INTRIGUING:

(A) perplexing

(B) dignified

(C) eccentric

(D) logical

(E) advantage

19. VIGNETTE:

(A) conundrum

(B) sketch

(C) dynamic

(D) factor

(E) tangent

20. TRANSITORY:

(A) resilient

(B) intermittent

(C) ephemeral

(D) mercurial

(E) anomalous

21. APTITUDE

(A) height

(B) ability

(C) attitude

(D) retraction

(E) contrast

22. RECALCITRANT

(A) insecure

(B) deciduous

(C) stubborn

(D) fortified

(E) brief

23. ENVELOP:

(A) entrust

(B) cut off

(C) freeze

(D) enclose

(E) inside

24. EXTRANEIOUS:

(A) accelerated

(B) fascinating

(C) uncertain

(D) irrelevant

(E) impudent

25. RENDITION:

(A) refrain

(B) article

(C) version

(D) song

(E) collection

26. PLUMMET:

(A) fall

(B) indicate

(C) celebrate

(D) hasten

(E) undermine

27. DECOMPOSITION

A. combustion

B. infiltration

C. perturbation

D. equalization

E. disintegration

28. EXACERBATE:

(A) implicate

(B) aggravate

(C) heal

(D) decondition

29. SOLITARY:

(A) single

(B) solid

(C) sturdy

(D) stoic

30. QUANDARY:

(A) dilemma

(B) section

(C) champion

(D) sleeve

(E) collaboration

31. Bottle is to liquids as

(A) plate is to fork

(B) napkin is to placemat

(C) bowl is to soup

(D) cream is to milk

(E) cup is to mug

32. Spoon is to ladle as knife is to

(A) fork

(B) scissors

(C) cleaver

(D) drawer

(E) rack

33. Silk is to rayon as

(A) butter is to margarine

(B) icicle is to freezer

(C) tomato is to ketchup

(D) carrot is to blender

(E) screening is to theatre

34. Star is to constellation as

(A) soldier is to regiment

(B) flying saucer is to alien

(C) tundra is to continent

(D) electrician is to circuitry

(E) religion is to ministry

35. Garment is to alteration as book is to

(A) publication

(B) genre

(C) revision

(D) catalog

(E) distribution

36. Light-year is to space as

(A) fathom is to ocean

(B) humidity is to rainforest

(C) latitude is to land

(D) seismograph is to underground

(E) mirage is to desert

37. Mailman is to mail as porter is to
- (A) memorabilia
- (B) baggage
- (C) groceries
- (D) supplies
- (E) information
38. Engagement is to marriage as
- (A) tumble is to fall
- (B) gamble is to invest
- (C) ride is to race
- (D) sack is to celebrate
- (E) teach is to learn
39. Fidget is to restlessness as
- (A) fret is to migraine
- (B) salute is to discipline
- (C) strut is to vanity
- (D) hiccup is to moisture
- (E) blink is to focus
40. Alpha is to omega as
- (A) January is to December
- (B) apple is to orange
- (C) fork is to spoon
- (D) wool is to fleece
- (E) quarterback is to lineman
41. Ponderous is to weight as
- (A) taciturn is to talk
- (B) diminutive is to height
- (C) pictographic is to sight
- (D) gargantuan is to size
- (E) dense is to volume
42. Ground crew is to flags as pilot is to
- (A) tower
- (B) runway
- (C) searchlight
- (D) cockpit
- (E) radio
43. Safe is to combination as
- (A) forehead is to bandana
- (B) liquid is to siphon
- (C) metal is to aluminum
- (D) necklace is to clasp
- (E) estate is to landowner
44. Valley is to chasm as
- (A) trench is to gorge
- (B) cliff is to mountain
- (C) flicker is to candle
- (D) gathering is to gala
- (E) melody is to harmony
45. Lucrative is to profitable as
- (A) variable is to consistent
- (B) excruciating is to tolerable
- (C) jocular is to athletic
- (D) exorbitant is to excessive
- (E) vivacious is to astute
46. Clay is to pottery as
- (A) marble is to sculpture

- (B) paint is to frame
- (C) rug is to wool
- (D) sentences is to paragraph
- (E) stone is to wood
47. Sight is to sense as gravity is to
- (A) Weight
- (B) Pounds
- (C) distance
- (D) force
48. weave is to basket as knit is to
- (A) brow
- (B) scarf
- (C) sew
- (D) needle
49. DODO: BIRD:
- (A) horse: mule
- (B) dinosaur: reptile
- (C) venom: snake
- (D) rooster: hen
- (E) dog: puppy
50. Cavernous is to hollow as calamitous is to
- (A) important
- (B) uneventful
- (C) unfortunate
- (D) typical
- (E) deep
51. Varied is to identical as
- (A) collaborative is to unilateral
- (B) reticent is to hesitant
- (C) joyous is to serious
- (D) mysterious is to friendly
- (E) exotic is to alike
52. Album is to song as
- (A) lyric is to music
- (B) paragraph is to text
- (C) menu is to dish
- (D) page is to novel
- (E) items is to list
53. Period is to sentence as
- (A) checkmate is to chess game
- (B) curtain is to play
- (C) arrest is to case
- (D) yoyo is to string
- (E) crying is to movie
54. Harmonious is to contemporaneous as
- (A) consonant is to temporary
- (B) distemper is to similarity
- (C) temporal is to musical
- (D) incompatible is to anachronistic
- (E) simultaneous is to recurrent
55. DEFEND: UNTENABLE:
- (A) escape: unfettered
- (B) judge: punitive
- (C) modify: invariable

- (D) flourish: vigorous
- (E) protect: dangerous
56. Sedative is to drowsiness as
- (A) epidemic is to contagiousness
- (B) vaccine is to virus
- (C) laxative is to drug
- (D) anesthetic is to numbness
- (E) therapy is to psychosis
57. RIDDLE is to PUZZLEMENT as
- (A) comedy is to stage
- (B) clown is to costume
- (C) quip is to wit
- (D) jest is to laughter
- (E) pun is to meaning
58. Calculator is to compute as
- (A) plug is to insert
- (B) clamp is to grip
- (C) saddle is to straddle
- (D) bridge is to suspend
- (E) incinerator is to warm
59. Prudent is to indiscretion as
- (A) frugal is to wastefulness
- (B) proud is to accomplishment
- (C) generous is to wealth
- (D) disqualified is to competition
- (E) disgruntled is to cynicism
60. Paramount is to importance as
- (A) debatable is to quality
- (B) inaccurate is to correction
- (C) modulated is to pitch
- (D) unheralded is to publicity
- (E) precious is to value

## SECTION 2

1. A gas tank is  $\frac{1}{3}$  empty. When full, the tank holds 18 gallons. How many gallons are in the tank now?  
(A) 3 (B) 6 (C) 8 (D) 12 (E) 18
2. If a number is subtracted by 5, the difference is 1. If the same number is divided by 2, the answer is?  
A. 0  
B. 1  
C. 2  
D. 3  
E. 4
3. In Figure 1 (pictured below), the distance from i4 to D is 48. The distance from A to B is equal to the distance from B to C. If the distance from C to D is twice the distance of A to B, how far apart are B and D?



Figure 1

4. If  $\frac{4}{5}$  of a number is 16, then  $\frac{1}{5}$  of that number is\_\_\_\_\_.

- (A) 4
- (B) 7
- (C) 21
- (D) 35
- (E) 112

5.  $2.01 \div 1.02 =$ \_\_\_\_\_.

- (A) 0.507
- (B) 1.83
- (C) 1.97
- (D) 2.0001

- (E) 3.03

6. What is the value of  $a$  in Figure 1?

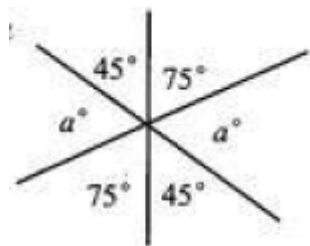


Figure 1

- (A) 30
- (B) 60
- (C) 90
- (D) 120

- (E) It cannot be determined from the information given.

7. In a jar of gumdrops, the ratio of green gumdrops to red gumdrops is 9:5. If only green and red gumdrops are in the jar and the total number of gumdrops is 56, how many green gumdrops are in the jar?

- (A) 5
- (B) 8
- (C) 15
- (D) 28
- (E) 36

8. Which of the following can be expressed as  $(J + 5) \times 3$  where  $J$  is a whole number?

- (A) 40
- (B) 52
- (C) 65
- (D) 74
- (E) 81

9. If 5 books cost  $d$  dollars, how many books can be purchased for 7 dollars?

- (A)  $\frac{7d}{5}$

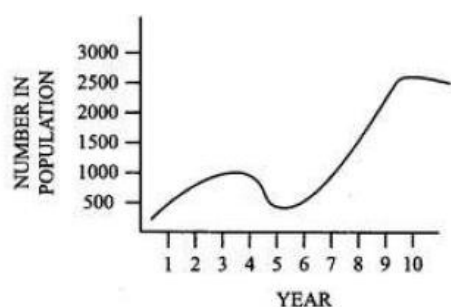


- (B)  $35d$
- (C)  $\frac{d}{35}$
- (D)  $\frac{35}{d}$
- (E)  $\frac{5d}{7}$

10. On a map, 2 inches represent 12 miles. How many miles would 5 inches represent?

- (A) 6
- (B) 8
- (C) 30
- (D)  $37\frac{1}{2}$
- (E) 75

11. During which years did the population increase at the fastest rate?



- (A) Years 5-7
- (B) Years 1-4
- (C) Years 4-5
- (D) Years 7-9
- (E) Years 9-10

12.  $\frac{6}{7}$  is closest in value to which of the following?

- (A) 0.20
- (B) 0.30
- (C) 0.60
- (D) 0.80
- (E) 0.90

13.  $\#(-6) - \#(6) =$

For all real numbers  $x$ ,

$\# x = x^2$  if  $x$  is negative;

$\# x = 2x$  if  $x$  is positive.

- (A) -16
- (B) -24
- (C) 16
- (D) 24
- (E) 30

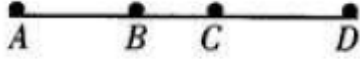
14. Johnny picked apples from 9:00 A. M. to 11:30 A.M. and gathered 200 apples. He wants to pick a total of at least 600 apples before 7:15 P. M. If he plans to pick apples at the same rate, what is the latest time that he can start picking apples again?

- (A) 1:15 P.M.
- (B) 1:45 P.M.
- (C) 2:15 P.M.
- (D) 2:45 P.M.
- (E) 3:15 P.M.

15. If  $(x - y) + 2 = 6$  and  $y$  is less than 3, which of the following CANNOT be the value of  $x$ ?

- (A) -3
- (B) 0
- (C) 1
- (D) 4
- (E) 8

16. In Figure 5, the distance from  $A$  to  $D$  is 75, and the distances from  $A$  to  $B$  and from  $C$  to  $D$  are equal. If the distance from  $B$  to  $C$  is half the distance from  $A$  to  $B$ , how far apart are  $A$  and  $B$ ?



- (A) 4  
(B) 20  
(C) 24  
(D) 30  
(E) 60

17. A certain pump can drain a full 375-gallon tank in 15 minutes. At this rate, how many more minutes would it take to drain a full 600-gallon tank?

- (A) 9  
(B) 15  
(C) 18  
(D) 24  
(E) 25

18. Which of the following is equivalent to  $\frac{1}{2}$  of 23 percent of 618?

- (A) 23% of 309  
(B) 23% of  $\frac{309}{2}$   
(C)  $22\frac{1}{2}\%$  of 618  
(D)  $\frac{23}{2}\%$  of 309  
(E)  $\frac{23}{2} \times 618$

19. Express 0.075 as a percent.

- (A) 75%  
(B) 7.5%  
(C) 0.75%  
(D) 0.075%  
(E) 8%

20. Jim has three times as many comic books as Charles. Charles has two-thirds as many comic books as Bob. Bob has 27 comic

books. How many comic books does Jim have?

- (A) 36  
(B) 50  
(C) 54  
(D) 64  
(E) 72

21. What is 72 expressed as the product of prime factors?

- A.  $2 \times 3$   
B.  $2 \times 3 \times 12$   
C.  $2 \times 2 \times 2 \times 3 \times 3$   
D.  $8 \times 9$   
E.  $6 \times 6 \times 2$

22. Aram lives 5 miles from Brian's house. Simran lives 8.5 miles from Brian's house. How far is Aram's house from Simran's house?

- (A) 3.5 miles  
(B) 5 miles  
(C) 11 miles  
(D) 13.5 miles  
(E) It cannot be determined from the information given.

23. Mike's soccer team has won 4 games and lost 7 games. There are 11 more games left in the season. How many more games must Mike's team win in order to have an equal number of wins and losses for the whole season?

- (A) 4  
(B) 7  
(C) 9  
(D) 10  
(E) 11

24. In Figure 3, a square with a side length of 8 is adjacent to a triangle with a base of 8. If the height of the entire figure is 10, what is its area?

- (A) 56  
(B) 64

(C) 72

(D) 80

(E) It cannot be determined from the information given.

25. If  $\frac{b}{a}$  is divisible by 6, which of the following must also be divisible by 6?

(A)  $\frac{a}{2b}$

(B)  $\frac{2a}{b}$

(C)  $\frac{a+b}{b}$

(D)  $\frac{a-b}{c}$

(E)  $\frac{a}{a+b}$

### SECTION 3

1. At the start of the year, Terry invested \$6,000 in South Bend Oil Corp. At the end of the year, his stock was worth \$4,500. What was the percent decline in the value of his investment?

(A) 25%

(B)  $33\frac{1}{3}\%$

(C)  $66\frac{2}{3}\%$

(D) 75%

(E) 125%

2. In the number 234.56, which digit is the tenths place?

A. 2

B. 3

C. 4

D. 5

E. 6

3. A pair of hiking boots that normally sells for \$129.00 is being discounted by one-third. Rounded to the nearest dollar, how much will the buyer save with this discount?

(A) \$43

(B) \$54

(C) \$65

(D) \$72

(E) \$86

4. Of the following, 0.49 x 82 is closest to\_\_\_\_\_.

(A)  $\frac{1}{2}$  of 80

(B)  $\frac{1}{2}$  of 90

(C)  $\frac{1}{4}$  of 80

(D)  $\frac{1}{4}$  of 90

(E) 4 times 80

5.  $2.01 \div 1.02 = \underline{\hspace{2cm}}$ .

- (A) 0.507
- (B) 1.83
- (C) 1.97
- (D) 2.0001
- (E) 3.03

6. In 2 hours, the minute hand of a clock rotates through an angle of  $\underline{\hspace{2cm}}$ .

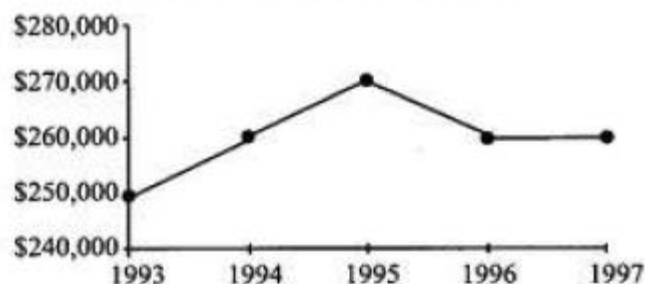
- (A)  $60^\circ$
- (B)  $90^\circ$
- (C)  $180^\circ$
- (D)  $360^\circ$
- (E)  $720^\circ$

7. One fifth of a class chose electricity for the topic of a science project. If 4 students chose this topic, how many students are in the class?

- (A) 20
- (B) 10
- (C) 8
- (D) 5
- (E) 2

8. According to the graph in Figure 3, the average sales of Company *M* from 1993 to 1997 was .

SALES OF COMPANY M: 1993-1997



- (A) \$250,000
- (B) \$260,000
- (C) \$265,000
- (D) \$270,000
- (E) \$275,000

For all real numbers  $n$  and  $r$ ,  $n \clubsuit r = (n - 1) - \frac{n}{r}$ .

EXAMPLE:  $5 \clubsuit 3 = (5 - 1) - \frac{5}{3} = 4 - \frac{5}{3} = 2\frac{1}{3}$

9. What is the value of  $6 \clubsuit 2$ ?

- (A) 1
- (B) 2
- (C) 6
- (D) 8
- (E) 16

10. The approximate distance,  $S$ , in feet that an object falls in  $t$  seconds when dropped from a height can be found by using the formula  $S = 16t^2$ . In 4 seconds the object will fall  $\underline{\hspace{2cm}}$ .

- (A) 256 feet
- (B) 1,024 feet
- (C) 1,084 feet
- (D) 2,048 feet
- (E) 15,384 feet

11. If there are 14 blue socks and 35 red socks in a drawer, what is the ratio of blue socks to red socks?

- (A) 1 : 7
- (B) 3 : 2
- (C) 2 : 3
- (D) 2 : 5
- (E) 3 : 5

12.  $\frac{6}{7}$  is closest in value to which of the following?

- (A) 0.20
- (B) 0.30
- (C) 0.60
- (D) 0.80
- (E) 0.90

For all positive integer values of  $x$ ,

$(x) = \frac{1}{2}x$  if  $x$  is even;

$(x) = 2x$  if  $x$  is odd.

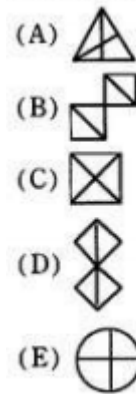
13. Which of the following equals  $(4z + 1)$ ?

- (A)  $2z + \frac{1}{2}$
- (B)  $2z + 1$
- (C)  $4z + 2$
- (D)  $4x + 1$
- (E)  $8z + 2$

14. If  $\frac{A+B}{3} = 4$  and  $A$  is greater than 1, which of the following could NOT be the value of  $B$ ?

- (A) -3
- (B) 0
- (C) 1
- (D) 2
- (E) 12

15. Which figure can be drawn WITHOUT lifting the pencil or retracing?



16. If 0.25 is about  $\frac{10}{N+1}$ , then  $N$  is closest to which of the following?

- (A) 0.4
- (B) 3
- (C) 4
- (D) 39
- (E) 40

17. What is the solution set to the inequality  $|3 - 2x| > 9$ ?

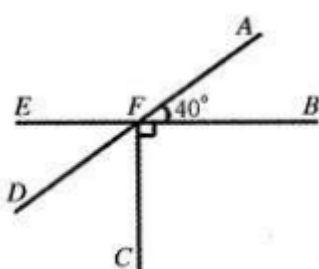
- (A)  $-3 < x < 6$
- (B)  $-6 < x < 3$
- (C)  $-6 < x < 6$
- (D)  $x < -6$  or  $x > 3$
- (E)  $x < -3$  or  $x > 6$

18. If  $|6 - 5y| > 20$ , which of the following is a possible value of  $y$ ?

- (A) -3
- (B) -1
- (C) 1
- (D) 3
- (E) 5

19. A tap can fill a tank in 6 hours and another can empty it in 8 hours. In how many hours the tank will be full if both are open?

- (A) 12
- (B) 24
- (C) 36
- (D) 48
- (E) 60



Note: Figure not drawn to scale.

refer to the following definition: For all real numbers  $r$  and  $s$ ,  $r \star s = (r \times 8) - (r - s)$ .

20.  $10 \star 2 =$

- (A) 20
- (B) 16
- (C) 12
- (D) 8
- (E) 4

21. A store has square rugs in three sizes. A side of the largest rug is twice as long as a side of the middle one, and a side of the middle one is twice as long as a side of the smallest one. What is the ratio of the area that the largest rug will cover to the area that the smallest one will cover?

- A. 3 to 1
- B. 4 to 1
- C. 8 to 1
- D. 9 to 1
- E. 16 to 1

22. A and B have an average of 15. If A is greater than B, which of the following MUST be true?

- (A)  $A + B = 15$
- (B)  $\frac{A}{B} \div 2 = 15$
- (C)  $A = 12$  and  $B = 18$
- (D)  $A - B = 20$
- (E)  $(A + B) \div 2 = 15$

23. If  $\star x = (x + 2) + 1$ , then  $\star 5 =$

- (A) 8
- (B) 11
- (C) 15
- (D) 16
- (E) 50

24. A bank has 24 security guards. One third of the security guards work a night shift. How many security guards do NOT work a night shift?

- (A) 6
- (B) 8
- (C) 12
- (D) 16
- (E) 18

25. 5 athletes competed on a team in a relay race, where each athlete ran 1 lap around a track. Catherine and William averaged 87 seconds per lap. Elizabeth, Rufus, and Henry averaged 97 seconds per lap. When all 5 laps were complete, what was the team's total time?

- (A) 455 seconds
- (B) 460 seconds
- (C) 465 seconds
- (D) 470 seconds

(E) 475 seconds

#### SECTION 4

"The President shall from time to time give to Congress information of the State of the Union and recommend to their Consideration such measures as he shall judge necessary and expedient."

Article II, Sec. 3, U.S. Constitution

On a cold January morning in 1790, George Washington personally delivered the first state of the union address to a joint meeting of the two bodies of Congress at Federal Hall in New York City, which was then the provisional capital of the United States. Since Washington's first speech to Congress, U.S. Presidents have "from time to time" given Congress an assessment of the condition of the union. Presidents have used the opportunity to present their goals and agenda through broad ideas or specific details. The annual message or "State of the Union" message's length, frequency, and method of delivery have varied from President to President and era to era.

In 1801, Thomas Jefferson discontinued the practice of delivering the address in person, regarding it as too monarchial for the new republic. Instead, Jefferson wrote out his address and sent it to Congress to be read by a clerk. This practice continued for the next 112 years. The first president to revive Washington's spoken precedent was Woodrow Wilson in 1913.

For many years, the speech was referred to as "the President's Annual Message to Congress." The term "State of the Union" did not become



widely used until after 1935 when Franklin Delano Roosevelt began using the phrase.

35 With the advent of radio and television, the President's annual message has become not only a conversation between the President and Congress but also an opportunity for the President to communicate with the American people at the same time. Calvin Coolidge's 1923 speech was the first to be broadcast on radio. Harry S. Truman's 40 1947 address was the first to be broadcast on television. Lyndon Johnson's address in 1965 was the first delivered in the evening, and George W. Bush's 2002 address was the first to be broadcast 45 live on the World Wide Web.

1. The author most likely included the quotation from the U.S. Constitution in lines 1-4 in order to
  - (A) show how well the author knows the Constitution
  - (B) illustrate the wording used in the Constitution
  - (C) explain the reason for the State of the Union address
  - (D) demonstrate how different Presidents have interpreted the same provision
  - (E) point out the difference between a constitutional duty and a custom
  
2. The phrase “from time to time” in line 1 has been interpreted to mean
  - (A) once in a while
  - (B) in a timely manner
  - (C) annually
  - (D) at a convenient time
  - (E) when time allows
  
3. U.S. presidents deliver State of the Union messages primarily because they
  - (A) are following a tradition started by George Washington
  - (B) are required to do so by the U.S. Constitution
  - (C) need to fulfill campaign promises
  - (D) want to thank their supporters
  - (E) are trying to unify opposing factions
  
4. Thomas Jefferson's State of the Union address differed from Washington's address in that Jefferson
  - (A) spoke first to the Senate and then to the House of Representatives
  - (B) presented more frequent messages than did Washington
  - (C) broadcast his message on radio
  - (D) did not deliver his address in person
  - (E) had his speech printed in the newspaper
  
5. In the first half of the twentieth century, the State of the Union address was forever changed by
  - (A) the advent of radio and television

- (B) Thomas Jefferson
- (C) Lyndon Johnson
- (D) moving the site of the speech from New York to Washington, D.C.
- (E) newspaper coverage of the speech

## Passage 2

When you buy a house plant, if the plant is healthy, it is likely to grow successfully in your home. How do you decide if a plant is sound? First, look at the leaves. If they are

5 brown at the edges, the plant has been given too much fertilizer or has been kept in temperatures that are too warm for its species. If the leaves are pale or yellow, the plant has been given too much or too little

10 water. If the leaves are very far apart from each other on the stem, this may mean the plant has been pushed to grow abnormally fast, and new leaves will not grow to fill in the gaps. You should look for a plant whose

15 foliage is dense.

After checking the leaves' general appearance, look carefully at the underside of the leaves and the places where the leaves join the stem for evidence of insects.

20 Because the insects that infest house plants are very tiny, it may be hard to see them. But they leave clues that they are living on the plant. Some secrete a shiny sticky substance called honeydew on the plant.

25 Others leave behind tiny fine white webs.

30 Finally, check to see if the plant's roots are growing out through the drainage hole in the bottom of the pot. If the roots are growing through the hole, the plant has outgrown its pot, and it may not be the healthiest plant, even if you repot it in a larger container.

6. If a plant has been given too much fertilizer,
- (A) its leaves may have brown edges.
  - (B) its leaves may be yellow.
  - (C) there will be tiny webs on the leaves.
  - (D) the foliage will be dense.
  - (E) the soil will appear dry.
7. To check a plant's health, examine
- (A) leaf color.
  - (B) leaf density.
  - (C) the bottom of the pot.
  - (D) the stem.
  - (E) All of the above
8. In context, "infest" (line 20) most likely means
- (A) infect.
  - (B) cat.
  - (C) grow from.
  - (D) live on.
  - (E) secrete.
9. Too much or too little water will cause
- (A) dark-colored foliage.
  - (B) large gaps between the leaves.
  - (C) yellow or pale leaves.
  - (D) roots to grow out of the drainage hole.
  - (E) shiny spots on the stem.
10. Based on this passage, a reader can infer that
- (A) all growers of plants for sale raise them in perfect conditions.
  - (B) some plants for sale have not been cared for properly.
  - (C) plants are forced to grow abnormally fast.
  - (D) it is difficult to care for a plant at home.
  - (E) a plant's health is based on its environment.

### Passage 3

Is Earth flat or round? Until 1522, most people believed Earth was flat. In that year one of Magellan's ships completed the first trip all the way around Earth. Long before  
5 the explorer Magellan, however, early scientists thought that Earth was shaped like a ball. In geometry the ball shape is called a sphere, so the earth scientists said that Earth is spherical.

10 The spherical model of Earth is based on such evidence as the following:

The mast of a ship was the first part to appear over the horizon. It was the last part to disappear. The traditional cry of the  
15 lookout in a sailing vessel is, "I see a mast."

When ships sailed north or south, sailors observed that the nighttime sky changed in appearance. The North Star rose higher in the sky as they sailed northward. It  
20 sank in the sky as they sailed southward.

The position of the North Star changed so gradually and so evenly that it could only be explained in one way. The ship was sailing on a spherical surface. When ships sailed far  
25 enough south, constellations such as the Big Dipper could no longer be seen, but new ones such as the Southern Cross appeared in the sky. Would this be true on a flat Earth?

An eclipse of the moon occurs when

30 Earth's shadow falls on the moon. During an  
eclipse of the moon, the edge of Earth's  
shadow as it moves across the moon is  
always the arc of a circle. Only a sphere  
casts a circular shadow, no matter what  
35 position it is in.

The evidence listed above is, of course,  
still visible today, although a lookout is  
much more likely to see a smokestack than a  
mast. But now everyone can see the  
40 evidence. Many photographs of Earth have  
been taken by orbiting spacecraft. Other  
photographs of Earth have been taken from  
the moon by the Apollo astronauts.

11. In the context of the passage, the word “constellation” (line 25) most likely means
- (A) a group of planets.
  - (B) a number of spheres.
  - (C) a pattern of stars.
  - (D) the Big Dipper.
  - (E) the North Star.
12. When a ship sails north, the North Star
- (A) stays in the same place in the sky.
  - (B) rises higher in the sky.
  - (C) sinks lower in the sky.
  - (D) becomes the Southern Cross.
  - (E) changes shape.
13. In the paragraph describing an eclipse of the moon, we can infer that the
- (A) earth is flat.
  - (B) moon is closer to the earth than the sun.
  - (A) earth is in shadow.
  - (C) moon has an orbit.
  - (D) earth is spherical.
14. The title that best expresses the idea of this passage is
- (A) “Magellan’s Trip Around the World.”
  - (B) “What We Need from the Moon.”
  - (C) “Science Has All the Answers.”
  - (D) “The Earth Is Spherical.”
  - (E) “The Meaning of a Lunar Eclipse.”
15. The deduction that the earth is round is based on all of the following EXCEPT the
- (A) observation of eclipse.
  - (B) observations of sailors.
  - (C) observation of constellations.
  - (D) observations of philosophers.
  - (E) observations of astronauts.



The French museum The Louvre sits on the bank of the Seine River in Paris. It was originally constructed as a fortress for Philippe Auguste in 1190; Charles V

5      oversaw the first modernization process, which resulted in what was to be the beginnings of one of the largest palace complexes in the world.

Many additions and renovations were  
10      carried out over the next three centuries until Louis XIV, in 1674, ended construction at the Louvre and made Versailles the official residence of the French monarch. Versailles remained the official residence until the  
15      Revolution.

In 1699, the Grande Gallerie of the Louvre was used for a public art exhibition. The success of this led to further exhibitions, which from 1725 were regularly held in the  
20      Grande Salon at the end of the Grande Gallerie.

In 1765, the public and some writers of the time requested that the Louvre be earmarked to become a Palace of Arts and  
25      Sciences. It was not until after the Revolution in August 1793 that the Louvre museum was established by the French Republic.

Today the Louvre houses more than  
30      6000 European paintings dating from the 13th century to the 19th century. Its collections include Islamic art, Oriental

antiquities, Egyptian antiquities, and Greek  
antiquities with pieces that date back as far  
35 as the seventh millennium B.C.

The significance of this great art  
museum cannot be overstated. It has  
absorbed and reflected the centuries of  
change in the political and social  
40 environment in which it has played many  
roles. It has become a symbol of art and a  
Mecca for artists and art lovers alike. Indeed  
the Louvre "embodies for the vast public the  
very concept of the term "museum.

16. Over the centuries the Louvre has been which of the following

- I. a palace
- II. a fortress
- III. a university

(A) I only

(D) II and III only

(C) I and III only

(D) I and II only

(E) II only

17. Louis XIV had what impact on the evolution of the Louvre

(A) He renovated it into one of the largest palace complexes.

(B) He agreed to turn it into a museum.

(C) He modernized its architecture.

(D) He halted new building and renovation.

(E) He prohibited monarchs from living in it.

18. The passage implies that the Louvre became a “Mecca” for artists largely as a result of

(A) Louis the XIV’s inspiration

(B) the most fitting use of the building’s architecture

(C) the French revolution

(D) the suggestion of the public and the artists

(E) the French Republic's desire to entice artists to live in Paris

19. The author's attitude towards the Louvre is

(A) overwhelmed

(B) sarcastic

(C) critical

(D) nonplused

(E) enthusiastic

20. The word “antiquities,” as used in the passage means

(A) relicts from ancient civilizations

(B) Islamic art

(C) Ancient European tests

(D) art from Versailles

(E) art that was commissioned by Louis XIV

### Passage 5

Although the First World War had been fought as the “war to make the world safe for democracy,” and the “war to end all wars,” the world’s problems were not solved when fighting was stopped by the cease-fire agreement signed on November 11, 1918.

The world was not yet at peace. In Russia, there was a civil war among various

5 **factions** wishing to replace the monarchy, which had been led by the Czar. Greece was fighting Turkey over territory that had belonged to the former Turkish Empire. In the Middle East, the Jews were asking for the establishment of a national homeland, and the Arabs in the area were opposing them. In India, at that time a colony of the British Empire, educated Indians thought their contributions to the war meant their

10 nation was ready for more self-rule and some independence from Great Britain. And throughout the world, populations had been reduced by the 1918 influenza epidemic,

which, most public health experts believe, killed more people than were killed in the war’s battles. When the Paris Peace Conference began in January 1919, the defeated nations were not invited. They would simply be notified of the terms of the peace

15 treaty and asked to sign it. In the United States, Americans’ disgust about the huge human costs of the war lead to isolationism, the desire to avoid international political situations and focus only on problems within the country. Thus, it is not surprising that the League of Nations, formed while the Peace Conference was in session as an international organization to create a better world, did not succeed in its

20 goals of achieving world disarmament and preventing nations from invading one another.

21. As used in the passage, the word “**factions**” means

- (A) fractions.
- (B) international terrorists.
- (C) nationalists.
- (D) disagreeing groups.
- (E) followers of the king.

22. The influenza epidemic of 1918

- (A) was a result of the war.
- (B) increased the misery of the soldiers.
- (C) killed vast numbers of civilians.
- (D) surprised public health experts.
- (E) was localized in a few nations.

23. The conflict between Greece and Turkey and the conflict between Jews and Arabs were similar because both

- (A) were about control over land.
- (B) involved a new homeland.
- (C) arose from the terms of the peace treaty.
- (D) led to revolutions.
- (E) were settled by the League of Nations.

24. Wishing to withdraw from international politics is called

- (A) organization.
- (B) monarchy.
- (C) factionalism.
- (D) isolationism.
- (E) home rule.

25. The fighting of World War I ended

- (A) after the world was made safe for democracy.
- (B) in January 1919.
- (C) in November 1918.
- (D) when the League of Nations was founded.
- (E) by the terms of the peace treaty.

Cesar Chavez is best known for his efforts to gain better working conditions for the thousands of workers who labored on farms for low wages and under severe conditions. Chavez and his United Farmworkers union battled California grape growers by holding nonviolent protests. Chavez got the idea for nonviolent actions

5 from Martin Luther King Jr., who was a leader in the struggle for civil rights for African Americans. Chavez also went on hunger strikes, protesting by refusing to eat for long periods of time. In 1968 he fasted for 25 days in support of the United Farmworkers' commitment to non-violence. He was inspired to fast by M.K. Gandhi of India.

10 Because of Chavez's peaceful tactics and public support for the union, he and the United Farmworkers Organizing Committee were able to negotiate contracts for higher wages and better treatment of agricultural workers with California grape producers.

15 Like his protests, Cesar Chavez died peacefully. In 1993, he died in his sleep in San Luis, Arizona, where he had gone to testify against vegetable growers. An estimated 50,000 mourners attended his funeral service. In recognition of Chavez's importance as a leader of the Mexican American community and a champion of social justice, President Bill Clinton awarded the Medal of Freedom, the nation's highest civilian honor, to his widow, Helen Chavez, in 1994.

20 -America's Library



26. According to the passage, the main goal of Caesar Chavez was to
- (A) earn the nation's highest civilian honor.
  - (B) learn as much as he could from King and Gandhi.
  - (C) gain better working conditions for farm workers.
  - (D) be an honorable leader for the United Farmworkers.
  - (E) hold nonviolent protests and fast for three weeks.
27. Helen Chavez was awarded the Medal of Freedom because
- (A) her father was busy testifying in court.
  - (B) she was also a leader in the Mexican community.
  - (C) of her dedicated support for her husband.
  - (D) she was a champion of social justice in Mexico.
  - (E) her husband was not alive to receive it.
28. Caesar Chavez and Martin Luther King Jr. had all of the following in common EXCEPT:
- (A) Both men fought for rights for their people.
  - (B) Both men were killed for what they believed in.
  - (C) Both men held nonviolent protests.
  - (D) Both men were of a different racial background.
  - (E) Both men became famous in their home country.
29. According to the passage, Chavez gained "higher wages and better treatment" for farm workers in part due to
- (A) backing from regular citizens.
  - (B) a law passed by the President.
  - (C) his wife's position in the union.
  - (D) aid from Mexican politicians.
  - (E) his familiarity with grape production.
30. It is most reasonable to infer from the passage that

- (A) Helen Chavez continued her husband's work after his death.
- (B) most of the 50,000 people at Chavez's funeral were friends and relatives.
- (C) Bill Clinton also battled for civil rights for Mexican Americans.
- (D) California grape producers took advantage of their farm workers.
- (E) Mexican American farm workers had the highest pay in the country.

Electroconvulsive therapy(ECT) dates back to 1938, when two Italian psychiatrists, searching for a treatment for schizophrenia, used electricity to cause convulsions in a disturbed patient. The violent shaking seemed to improve his condition. Soon ECT became a common treatment for severe psychotic illnesses both  
5 in Europe and in the United States.

With the introduction in the 1950's of strikingly effective antipsychotic drugs such as chlorpromazine, the popularity of shock treatment began to wane. The decline was hastened by growing concern about the safety and effectiveness of ECT and by

10 charges that it was being used too often and too indiscriminately in hospitals and mental institutions that were little more than "shock mills."

31. The passage is mainly about the  
A use of antipsychotic drugs in the United States  
B future of electroconvulsive therapy  
C history of electroconvulsive therapy  
D disadvantages of using antipsychotic drugs  
E comparative uses of electroconvulsive therapy in Europe and in the United States
32. According to the passage, one of the reasons that ECT became unpopular was that  
A the general public was concerned about its emotional side effects  
B there were accusations of excessive and careless use  
C most patients conditions deteriorated soon after treatment  
D many doctors were untrained, in its use  
E most doctors preferred to use new counseling techniques
33. The style of the passage is most like that found in a  
A personal letter  
B novel about psychiatrists  
C psychology's manual  
D psychology textbook  
E patient's diary
34. The author's attitude toward ECT may best be described as one of  
A enthusiastic optimism  
B objective criticism  
C sarcastic exaggeration  
D sincere nostalgia  
E angry condemnation
35. It can be inferred from the passage that ECT?  
A was used more widely in Europe than in the United States  
B is still popular in most parts of the United States  
C was an extremely expensive treatment  
D is the most effective treatment for psychotic illness  
E is less effective than chlorpromazine

Grapes are one of the oldest cultivated fruits. Hieroglyphics show that Egyptians were involved in grape and wine production. Also, the early Romans were known to have developed many grape varieties.

5        Grapes have been grown in California for more than 200 years. The tradition of viticulture (growing grapes) began in 1769 when Spanish friars established missions throughout California.

10       In California, the boom in grapes planted for eating arose in the early 1800s. William Wolfskill, founder of California's citrus industry, planted the first table grape vineyard in 1839 near Los Angeles.

By the 1850s, the United States had officially acquired California from Mexico and 80,000 gold prospectors had moved to the region, a few of them realizing that there was money in grapes as well as in gold.

15       Today, California wine, table grapes and raisins are all important agricultural commodities, with approximately 700,000 acres planted in vineyards.

20       About 85% of California's table grape production is in the southern San Joaquin Valley region with the Coachella Valley region accounting for most of the remaining producti

36. This passage is mainly about
- (A) how Egyptians grew wine grapes.
  - (B) how to make raisins from grapes.
  - (C) William Wolfskill's life as a farmer.
  - (D) the history of growing grapes in California.
  - (E) how grapes were involved in the Gold Rush.
37. The best title for this passage is
- (A) Early Wine Production.
  - (B) California Table Grapes.
  - (C) Egyptian Hieroglyphics.
  - (D) The California Missions.
  - (E) Viticulture in California.
38. Most of California's table grapes are grown in
- (A) the San Joaquin Valley region.
  - (B) the Coachella Valley region.
  - (C) Los Angeles.
  - (D) the California missions.
  - (E) Rome.
39. William Wolfskill is credited with
- (A) deciphering hieroglyphics about grape and wine production.
  - (B) helping the United States acquire California.
  - (C) planting the first table grape vineyard in California.
  - (D) farming 700,000 acres of vineyards.
  - (E) growing citrus in the San Joaquin Valley.
40. The author most likely wrote this passage to
- (A) entertain the reader.
  - (B) persuade the reader.
  - (C) humor the reader.
  - (D) inform the reader.
  - (E) sway the reader.

[illegible]