## SECTION 1 VERBAL SKILLS

1. MALICE
(A) cunning
(B) forethought
(C) spite
(D) benevolence
(E) premeditation
2. FRACTION
(A) piece
(B) break
(C) breach
(D) disagreement
(E) opposing side
3. FRIENDLY
(A) congenital
(B) amiable
(C) sanctimonious
(D) ambivalent
(E) responsive
4. INQUIRY
(A) testimony
(B) subpoena
(C) investigation
(D) verification
(E) statement
5. IMPLEMENT
(A) idea
(B) detail
(C) instrument
(D) component
(E) property
6. TRANSPARENT
(A) opaque
(B) filmy
(C) serene
(D) glass
(E) motivation
(A) sleep
(B) cushion
(C) yam
(D) promise
(E) home
8) IMMENSE
(A) human
(B) obnoxious
(C) unbearable
(D) colossal
(E) unfortunate
9. FICKLE
(A) expired
(B) physical
(C) amazing
(D) inconstant
(E) odious
10. INDIGNATION
(A)truce
(B) pretense
(C) significance
(D) anger
(E) soar
11. TIMBER:
(A) music
(B) current
(C) bond
(D) forest
(E) tone
12. FABRICATE:
(A) decorate
(B) falsify
(C) deter
(D) fasten
(E) stitch

| (A) | seer | (B) | confuse |
| :--- | :--- | :--- | :--- |
| (B) | anticipation | (C) | point |
| (C) | crystal | (D) | wonder |
| (D) | fortune | (E) | discard |
| (E) | prediction |  |  |
|  |  | 20. | VISAGE: |
| 14. | PERTINENT: | (A) | wound |
| (A) | truthful | (B) | bandage |
| (B) | irreverent | (C) | encounter |
| (C) | prudent | (D) | station |
| (D) | irrelevant | (E) | face |
| (E) | applicable |  |  |

15. BUFFOON:
(A) median
(B) gas
(C) sphere
(D) gift
(E) fool
16. DEHYDRATED:
(A) waterless
(B) worthless
(C) deflated
(D) pointless
(E) airless
17. MURKY:
(A) musty
(B) gloomy
(C) religious
(D) forgetful
(E) sentimental
18. EXPRESS:
(A) quickly
(B) overnight
(C) holster
(D) verbalize
(E) careful
19. MARVEL:
(A) usurp
20. EXPURGATE:
(A) condense
(B) delineate
(C) aggrandize
(D) delete
(E) transcribe
21. HEINOUS:
(A) timid
(B) timorous
(C) forgettable
(D) abominable
(E) humble
22. FACILE:
(A) provocative
(B) consummate
(C) interminable
(D) effortless
(E) prolific

## 24. PROFOUND:

(A) simple
(B) colloquial
(C) cunning
(D) philosophical
(E) deep
25. AMORPHOUS:
(A) frightened
(B) repressed
(C) inaccurate

| (D) shapeless | (B) sparrow is to hungry |
| :---: | :---: |
| (E) trustworthy | (C) robin's egg is to blue |
|  | (D) tiger is to stripes |
| 26. INVALIDATE: | (E) green is to envy |
| (A) clarify |  |
| (B) overshadow |  |
| (C) duplicate | 32. Skyscraper is to building as |
| (D) nullify | (A) bank is to supermarket |
| (E) complement | (B) redwood is to tree |
|  | (C) house is to home |
| 27. FLAUNT: | (D) limousine is to rowboat |
| (A) endure | (E) sidewalk is to street |
| (B) calculate |  |
| (C) undermine |  |
| (D) moderate | 33. Pathetic is to pity as awesome is to |
| (E) boast | (A) warmth |
|  | (B) pride |
|  | (C) cool |
| 28. ELUCIDATE: | (D) boredom |
| (A) clarify | (E) amazement |
| (B) fortify |  |
| (C) comfort |  |
| (D) induce | 34. Bat is to racket as |
| (E) strengthen | (A) baseball is to tennis ball |
|  | (B) game is to player |
|  | (C) soccer is to kickball |
| 29.HARVEST | (D) basketball is to net |
| A. plague | (E) goalie is to hockey |
| B. reap |  |
| C. plant |  |
| D. harass | 35. POSTSCRIPT : LETTER: |
| E. deduce | (A) preamble: document |
|  | (B) footnote: reference |
|  | (C) epilogue: play |
| 30. STYMIE | (D) signature: name |
| (A) thwart | (E) index: page |
| (B) trickle |  |
| (C) buckle | 36. cool is to freezing as warm is to |
| (D) expel | (A). boiling |
| (E) contain | (B). summer |
|  | (C). heat |
|  | (D). cozy |

31. Canary is to yellow as
(A) crow is to purple
32. sedentary is to sit as
(A). descry is to lampoon
(B). espoused is to belief
(C). perseverance is to endurance
(D). peripatetic is to wander
(E). passionate is to impassive
33. Discourage is to obstruct as
(A) straighten is to tangle
(B) laugh is to sigh
(C) ask is to obey
(D) limit is to abolish
(E) imitate is to silence
34. Thermometer is to heat as
(A) speedometer is to distance
(B) barometer is to rainfall
(C) protractor is to length
(D) compass is to altitude
(E) balance is to weight
35. Enigma is to perplexing as schemer is to
(A) dishonest
(B) successful
(C) gracious
(D) healthy
(E) plump
36. Clip is to movie as
(A) annex is to building
(B) excerpt is to novel
(C) runway is to terminal
(D) gauze is to blood
(E) nebula is to universe
(E) nebula is to universe
37. Ground crew is to flags as pilot is to
(A) tower
(B) runway
(C) searchlight
(D) cockpit
(E) radio
(E)
38. Cell is to organism as worker is to
(A) boss
(B) office
(C) employee
(D) income
(E) staff
39. Abbreviate is to speech as
(A) inhale is to gas
(B) procure is to service
(C) allocate is to payment
(D) breed is to offspring
(E) edit is to article
40. Text is to footnote as map is to
(A) border
(B) geography
(C) legend
(D) directions
(E) atlas
41. Grace is to duke as
(A) responsibility is to superintendent
(B) discipline is to admiral
(C) honor is to judge
(D) order is to chairman
(E) vision is to commissioner
42. Thermostat is to regulate as insulation is to
(A) translate
(B) conserve
(C) entertain
(D) organize
(E) monitor
43. Payment is to debt as
(A) truce is to summit
(B) revenue is to industry
(C) council is to district
(D) premium is to insurance
(E) chlorine is to pool
44. Buoy is to ship as law is to
(A) regulation
(B) book
(C) veto
(D) citizen
(E) enactment
45. Scroll is to parchment as book is to
(A) author
(B) paper
(C) binding
(D) publisher
(E) contents
46. Poison is to death as
(A) bid is to auction
(B) capsule is to disease
(C) mirror is to resemblance
(D) objective is to proposition
(E) experience is to knowledge
47. Dull is to imagination as melancholy is to
(A) grudge
(B) discipline
(C) illusion
(D) definition
(E) joy
48. Sill is to window as
(A) pane is to glass
(B) crank is to casement
(C) hearthstone is to fireplace
(D) kitchen is to house
(E) ignition is to engine
49. Procure is to obtain as
(A) broadcast is to receive
(B) cherish is to reject
(C) travel is to dwell
(D) ask is to require
(E) burnish is to polish
50. Automobile is to garage as dish is to
(A). plate
(B). food
(C). cupboard
(D). spoon
(E). garbage
51. etch is to glass as paint is to
(A). canvas
(B). draw
(C). color
(D). brush
(E). taint
52. QUERULOUS: COMPLAIN:
(A) silent: talk
(B) humorous: laugh
(C) dangerous: risk
(D) deceitful: cheat
(E) gracious: accept
53. Botanist is to plants as
(A) economist is to newspaper
(B) geologist is to minerals
(C) impressionist is to people
(D) astronomer is to astronauts
(E) meteorologist is to forecasts
54. Problem is to calamity as
(A) happiness is to cheer
(B) luck is to veracity
(C) meal is to banquet
(D) discovery is to calumny
(E) animosity is to dislike
55. Slide is to stairs as
(A) elevator is to escalator
(B) pole is to ladder
(C) monkey bars are to sprinkler
(D) playground is to bank
(E) straw is to spoon

## Section 2 Math

1. On the map, the symbol l--1 represents 12 miles. If Hailey drives at a speed of 60 miles per hour, how long will it take her to drive from city A to city B?

(A) less than $90^{\circ}$
(B) exactly $90^{\circ}$
(C) between $90^{\circ}$ and $180^{\circ}$
(D) exactly $180^{\circ}$
(E) greater than $180^{\circ}$
2. Which of the following is NOT a multiple of4?
(A) 20
(B) 30
(C) 36
(D) 44
(E) 96
(A) 48 minutes
(B) 36 minutes
(C) 1 hour, 36 minutes
(D) 1 hour, 12 minutes
(E) 1 hour, 48 minutes
3. Simplify $3>\sqrt{8}-\sqrt{18}$.
(A) $2 \sqrt{3}$
(B) $4 \sqrt{3}$
(C) $3 \sqrt{2}$
(D) $3 \sqrt{5}$
(E) $4 \sqrt{2}$
4. If $2 / 3$ of a number is 24 , then $1 / 4$ of the same number is
(A) 20
(B) 16
(C) 13
(D) 12
(E) 9
5. Rachel flies 2,880 miles in 9 hours. What is the average speed of her airplane?
(A) 285 miles/hour
(B) 315 miles/hour
(C) 320 miles/hour
(D) 340 miles/hour
(E) 355 miles/hour
6. An obtuse angle is an angle that measures
7. One fifth of a class chose electricity for the topic of a science project. If 2 students chose this topic, how many students are in the class?
(A) 20
(B) 10
(C) 8
(D) 5
(E) 2
8. 

| Each ${ }^{3}$ 3. |  |
| :--- | :--- |

The number of Anna's absences is how many times the number of Cindy's absences?
(A) 1
(B) 2
(C) 4
(D) 12
(E) 18
9. At Nifty Thrifty Buy N Sell, an item that usually sells for $\$ 9$ is on sale for $\$ 6$. What
approximate discount does that represent?
(A) $10 \%$
(B) $25 \%$
(C) $33 \%$
(D) $50 \%$
(E) $66 \%$
(D) $4 \sqrt{13}$
(E) 13
(C) $2 \sqrt{13}$
10. At the Fantastic Zoo, the ratio of tigers to leopards is 5 to 1 . Which of the following could NOT be the total number of tigers and leopards at the zoo?
A. 6
B. 16
C. 18
D. 36
E. 60
11. A bag contains 14 blue, 6 red, 12 green and 8 purple buttons. 25 buttons are removed from the bag randomly. How many of the removed buttons were red if the chance of drawing a red button from the bag is now $1 / 3$ ?
(A) 0
(B) 1
(C) 3
(D) 5
(E) 6
12. $\frac{6}{7}$ is closest invalue to which of the
following?
(A) 0.20
(B) 0.30
(C) 0.60
(D) 0.80
(E) 0.90
13. 98 reduced by $\frac{2}{7}$ is equivalent to $\qquad$ -.
(A) 28
(B) 33
(C) 66
(D) 70
(E) 85
14. What is the distance between $(-10,-13)$ and $(-16,-9)$ along the line connecting them?
(A) 31
(B) 10 are W and Z ?
15. If $\frac{5}{x}$ is subtracted from $\frac{3}{x}$,the result is $\qquad$ .
(A) 2
(B) $\frac{8}{x}$
(C) $-\frac{2}{x}$
(D) $\frac{2}{x}$
(E) $\frac{2}{x^{2}}$

For all real numbers y and z , let $\mathrm{y} @ \mathrm{z}=\mathrm{y} \times \mathrm{z}-2$
16.3@9= $\qquad$ _.
(A) 15
(B) 19
(C) 21
(D) 25
(E) 27
17. What is the least number that can be added to 2,042 to produce a result divisible by 9 ?
(A) 1
(B) 2
(C) 3
(D) 5
(E) 6
18. In Figure 5, the distance between W and Y is three times the distance between W and X . and the distance between X and Z is twice the distance between X and Y . If the distance from W to X is 3, how far apart


Figure 5
(A) 10
(B) 12
(C) 15
(D) 16
(E) 18
19. Mrs. Brown and her $z$ children each ate 3 peaches. What's the total number of peaches they ate?
(A) $\mathrm{z}+1$
(B) $\mathrm{z}+3$
(C) $3 z$
(D) $3 z+1$
(E) $\quad 3 z+3$
20. $\frac{1}{2}(£ 4)=$ $\qquad$
(A) $\frac{4}{3}$
(B) $1 \frac{1}{6}$
(C) 2
(D) $2 \frac{1}{3}$
(E) $\quad 4 \frac{2}{3}$
21. At Nicholas's Computer World, computers usually sold for \$ 1,500 are now being sold for $\$ 1,200$. What fraction of the original price is the new price?
(A) $\frac{1}{10}$
(B) $\frac{1}{5}$
(C) $\frac{3}{4}$
(D) $\frac{4}{5}$
(E) $\frac{7}{10}$
22. If $x$ is greater than 0 but less than 1 , and $y$ is greater than x , which of the following is
the LEAST?
(A) $\frac{y}{x}$
(B) $\frac{x}{y}$
(C) $x y$
(D) $\frac{1}{x-y}$
(E) It cannot be determined from the information given.
23. If $C$ is the product of consecutive integers $A$ and $B$, then $C$ must be
(A) greater than $\mathrm{A}+\mathrm{B}$
(B) a negative integer
(C) a positive integer
(D) an even integer
(E) an odd integer
24. Each of the members in the Frank's private club can bring up to 5 guests to a party.
What is the maximum number of members and guests who might attend the party?
(A) $x+5$
(B) $5 x$
(C) $5 x+5$
(D) $6 x$
(E) $\quad 6 x+5$
25. If a die is tossed twice, the probability of getting a 3 on both tosses is
(A) $\frac{1}{4}$
(B) $\frac{1}{6}$
(C) $\frac{1}{12}$
(D) $\frac{1}{25}$
(E) $\frac{1}{36}$

## Section3

1. In an auto manufacturing plant, the ratio of executives to assembly line workers is $1: 15$. If there are 480 employees altogether, how many assembly line workers are there?
(A) 350
(B) 450
(C) 400
(D) 300
(E) 410
2. Sides $A B$ and $B C$ in $\triangle \mathrm{ABC}$ are equal in measure. If the exterior angle at $C$
measures $96^{\circ}$, find the measure of angle $B$.

(A) $18^{\circ}$
(B) $24^{\circ}$
(C) $12^{\circ}$
(D) $16^{\circ}$
(E) $19^{\circ}$
3. Which of the following Is NOT equal to a whole number?
(A) $\frac{32}{4}$
(B) $4 \times \frac{8}{16}$
(C) $8 \div \frac{1}{8}$
(D) $\frac{5}{12} \times 8$
(E) $\quad 6.4+11.6$
4. $46^{3 / 4} \%=$
(A) 467.5
(B) 46.75
(C) 4.675
(D) 0.4675
(E) 0.04675
5. It costs $m$ dollars to buy 64 cans of soda. At the same rate, how many dollars will it cost to buy 48 cans?
(A) $\frac{m}{4}$
(B) $\frac{3 m}{4}$
(C) $3 m$
(D) $\frac{4 m}{3}$
(E) $5 m$
6. $0.58 \times 0.14=$
(A) 812
(B) 8.12
(C) 81.2
(D) 0.812
(E) 0.0812
7. A bag has five green marbles and four blue marbles. If one marble is drawn at random, what is the possibility that it is NOT green?
(A) $\frac{1}{9}$
(B) $\frac{4}{9}$
(C) $\frac{5}{9}$
(D) $\frac{5}{20}$
(E) $\frac{4}{20}$
8. Which of the following is closest in value to 3 ?
(A) $(12 \times 6) \div 3$
(B) $23 \div 8$
(C) $\frac{1}{3}$ of 30
(D) $1.5 \times 1.75$
(E) $14 \div 4$
9. How long is chord $\overline{\mathrm{AB}}$ of circle O ?

(A) $\sqrt{10}$ (B) $10 \sqrt{2}$ (C) 100
(D) 10
(E) $\sqrt{50}$
10. 



How much money did Jessica's budget allow for housing in April of 2001?
A. $\$ 617.80$
B. $\$ 620.92$
C. $\$ 622.50$
D. $\$ 626.38$
E. $\$ 633.20$
11. Find the value of $x$ in Figure 7 (pictured below):

(A) 10
(B) 16
(C) 18
(D) 60
(E) 180
12. In the figure below, if lines $l_{1}$ and $l_{2}$ are parallel, and $/ 3$ transects $l_{1}$ and $l_{2}$ at an acute angle, which of the following statements is FALSE? ( $P, Q, R, S, T$ and $U$ are angles.)

(A) $\quad P=S$
(B) $\quad P=Q$
(C) $\quad T=S$
(D) $\quad T=P$
(E) $\quad R=Q$
13. Jeff, Todd, and Lee were hired by their father to work on the yard, and each was paid at the same hourly rate. Jeff worked 5 hours, Todd worked 7 hours, and Lee worked 8 hours. If the 3 boys together earned \$ 30, how much did Lee earn?
(A) $\$ 8$
(B) $\$ 12$
(C) $\$ 15$
(D) $\$ 16$
(E) $\$ 27$
14. A sportswriter claims that her football predictions are accurate $40 \%$ of the time. During football season, a fan kept records and found that the writer was inaccurate for a total of 30 games, although she did maintain her $40 \%$ accuracy. For how many games was the sports writer accurate?
(A) 5
(B) 15
(C) 20
(D) 40
(E) 60
15. A zoo has 3 times as many gorillas as tigers.

There are 3 more tigers than there are zebras at the zoo. If $z$ represents the number of zebras, in terms of $z$, how many gorillas are in the zoo?
(A) 3 z
(B) $\mathrm{z}+3$
(C) $\mathrm{z}+6$
(D) $3 z+3$
(E) $3 z+9$
16. The ratio of the area of the shaded part to the unshaded part is $\qquad$ -.

(A) $\mathrm{x}: \frac{x}{3}$
(B) $\quad 2: 1$
(C) $1: 3$
(D) $1: 2$
(E) $\quad 3: 1$
17. In Figure 6, the sides of triangles $A B C$ and $F G H$, and of squares $B C F E$ and $C D G F$, are all equal in length. Which of the following is the longest part from $A$ to $H$ ?
(D) 0.
(D) 0.04


Figure 6
(A) A-B-C-F-H
(B) $A-B-E-F-H$
(C) A-C-D-G-H
(D) $A-B-E-G-H$
(E) A-C-F-G-H
18. If $p$ pencils cost $c$ cents, $n$ pencils at the same rate will cost $\qquad$ _.
(A) $\frac{p c}{n}$ cents
(B) $\frac{c n}{p}$ cents
(C) $n p c$ cents
(D) $\frac{n p}{c}$ cents
(E) $n+p+c$ cents
19. What is 4 percent expressed as a decimal?
(A) 40
(B) 4
(C) 0.4
(E) 0.25
20. If $a+b=27$ and $3 c-a=0$, what does $c$ equal?
(A) $3 a$
(B) 27
(C) $27-b$
(D) $\quad 9-3 b$
(E) $\quad 9-\frac{b}{3}$
21. What is the total value, in cents, of $j$ coins worth 10 cents each and $j+5$ coins worth 25 cents each?
(A) $35 j+125$
(B) $35 j+5$
(C) $10 j+130$
(D) $15 j+5$
(E) $\quad 2 j+5$
22. $R$ is the sum of consecutive integers $S$ and $T$.

If $S$ and $T$ are negative, which of the
following is ALWAYS true?
(A) $\quad R=-4$
(B) $\quad R=-1$
(C) $\quad R$ is less than either $S$ or $T$
(D) $\quad R$ is greater than either $S$ or $T$
(E) $\quad R+S+T$ is positive
23. The price of a dress at a department store decreases by 20 percent every month it is not sold. After 3 months, the current price of the unsold dress is approximately what percent of the original price?
(A) $40 \%$
(B) $50 \%$
(C) $60 \%$
(D) $70 \%$
(E) $80 \%$
24. If a ; is greater than y and y is greater than 1 , which of the following is the LEAST?
(A) $\frac{1}{x}$
(B) $\frac{1}{y}$
(C) $\frac{1}{x-y}$
(D) $\frac{1}{y-x}$
(E) It cannot be determined from the information given.
25. $J$ is a whole number divisible by $4 . \mathrm{J}$ is also divisible by 3 . Which of the following is NOT a possible value for $J$ ?

Passage 1

Chopin's own playing was the counterpart of his personality. Every characteristic that could be distinguished in the man was apparent in the pianist-the same precision; the horror of excess and all that is careless and uncontrolled; the same good manners and high tone of character, combined with poetic warmth and a romantic fervor of expression. No one had ever heard such polished playing, although others could make a more overwhelming impression by their rush and violence. It is a mistake, encouraged by sentimental legend, to
believe that Chopin's playing was limited by a delicacy which was equivalent to weakness. Even in the last stages of tuberculosis, he could rally and play with an
energy that surprised the audience, who saw in front of them "a slight, frail-looking person." At his final public appearance in November 1848, less than a year before the end, he managed to play "with his usual brilliance."

1. The "end" mentioned most likely refers to

A Chopin's retirement from public life
$B$ the decline of Chopin's genius
C the invalidism caused by his illness
D Chopin's death in 1849
E the end of the concert tour
2. Performing while seriously ill with tuberculosis, Chopin surprised the audience with his

A frail appearance
B polish
C loss of control
D violence
E energetic playing
3. The author would most likely agree that

A Chopin was made seriously ill by widespread misinterpretation of his music
B Chopin's behavior alternated between extreme self-control and violent outbursts
C Chopin's character was a commendable blend of sensitivity and restraint
D the delicacy of Chopin's playing was due in large part to his health problems
E Chopin prolonged his life in spite of his illness by keeping active
4. Which of the following questions is answered by the passage?

A When did Chopin's genius reach its peak?
B Did Chopin's compose much of the music he played?
C How does Chopin's music mirror the times in which he lived?
D How long was Chopin ill with tuberculosis?
E How did Chopin compare with other pianists of his day?
5. When discussing Chopin, the author's tone in this passage could best be described as
A admiring
B brusque
C ironic
D hesitant
E anguished
6. This passage deals primarily with Chopin's

A musical compositions
B musical performance
C debilitating illness
D aristocratic personality
E romantic fervor

From 1892 to 1954, over twelve million immigrants entered the United States through the portal of Ellis Island, a small island in New York Harbor. Ellis Island is located in the upper bay just off the New Jersey coast, within the shadow of the Statue of Liberty. Through the years, this gateway to the new world was enlarged from its original 3.3 acres to 27.5 acres by landfill supposedly obtained from the ballast of ships, excess earth from the construction of the New York City subway system and elsewhere.

Before being designated as the site of one of the first Federal immigration station by President Benjamin Harrison in 1890, Ellis Island had a varied history. The local Indian tribes had called it "Kioshk" or Gull Island. Due to its rich and abundant oyster beds and plentiful and profitable shad runs, it was known as Oyster Island for many generations during the Dutch and English colonial periods. By the time Samuel Ellis became the island's private owner in the 1770's, the island had been called Kioshk, Oyster, Dyre, Bucking and Anderson's Island. In this way, Ellis Island developed from a sandy island that barely rose above the high tide mark, into a hanging site for pirates, a harbor fort, ammunition and ordinance depot named Fort Gibson, and finally into an immigration station.
7.Which of the following is true about Ellis Island?
I. It houses the Statue of Liberty.
II. The local Indian tribes called it Oyster Island.
III. It was expanded using dirt from the construction of the subway system.
(A) I only
(B) I and II only
(C) II and III only
(D) III only
(E) I, II, and III
8. The word "portal" in the first paragraph most likely means
(A) island.
(B) gateway.
(C) boat.
(D) subway.
(E) beach.
9. The style of this passage is most like that found in $\mathrm{a}(\mathrm{n})$
(A) immigrant's diary.
(B) business letter.
(C) history textbook.
(D) persuasive essay.
(E) short story.
10. How did the island get its current name?
(A) It was named after its private owner, Samuel Ellis.
(B) It developed from a sandy island to an immigration station.
(C) It was named after its abundant oyster beds.
(D) It was an ordinance and ammunition depot.
(E) The local Indian tribes named the island.
11. The author probably included the different names of Ellis Island to show
(A) how many owners the island had.
(B) that pirates used the island.
(C) that its size was increased.
(D) it was occupied during the Dutch and English colonial periods.
(E) the rich and varied history of the island.

## Passage3

The painter Georgia O'Keeffe was born in Wisconsin in 1887, and grew up on her family's farm. At seventeen she left for Chicago and New York but she never lost her bond with the land. Like most painters, O'Keeffe painted the things that were most important to her, and she became famous for her simplified paintings of nature.
During a visit to New Mexico in 1929, O'Keeffe was moved by the desert's stark beauty, and she began to paint many of its images. From about 1930 until her death in 1986, her true home was in the western desert, and bleached bones, barren hills, and colorful flowers were her characteristic subjects.

O'Keeffe is widely considered to have been a pioneering American modernist painter. While most early modern American artists were strongly influenced by European art, O'Keeffe's position was more independent.

Almost from the beginning, her work was more identifiably American-in its simplified and idealized treatment of color, light, space, and natural forms. Her paintings are generally considered "semiabstract", because, while they often depict recognizable images and objects, they don't present those images in a very detailed or realistic way. Rather, the colors and shapes in her paintings are often so reduced and simplified that they begin to take on a life of their own, independent from the real-life objects they are taken from.
12. The author's tone in this passage could best be described as $\qquad$ .
(A) serene
(B) bitter
(C) admiring
(D) neutral
(E) critical
13. According to the passage, all of the following strongly influenced O'Keeffe's paintings EXCEPT $\qquad$ _.
(A) the appearance of the natural landscape
(B) the work of artists in other countries
(C) animal and plant forms
(D) her life in the West
(E) her rural upbringing
14. O'Keeffe's relationship to nature is most similar to $\qquad$ .
(A) a student's relationship to a part-time job
(B) a photographer^ relationship to a model
(C) a writer's relationship to a publisher
(D) a carpenter's relationship to a hammer
(E) a sculptor's relationship to an art dealer

## Passage4

Coral reefs are among the most diverse and productive ecosystems on Earth. Consisting of both living and non-living components, this type of ecosystem is found in the warm, clear, shallow waters of tropical oceans worldwide. The functionality of the reefs ranges from providing food and shelter to fish and other forms of marine life to protecting the shore from the ill effects of erosion and putrefaction. In fact, reefs actually create land in tropical areas by formulating islands and contributing mass to continental shorelines.

Although coral looks like a plant, actually it is mainly comprised of the limestone skeleton of a tiny animal called a coral polyp. While corals are the main components of reef structure, they are not the only living participants. Coralline algae cement the myriad corals, and other miniature organisms such as tube worms and mollusks contribute skeletons to this dense and diverse structure. Together, these living creatures construct many different types of tropical reefs.

Great Barrier Reef is the world's largest network of coral reefs, stretching 2,010 km (1,

250 miles) off Australia's northeastern coast. From microorganisms to whales, diverse life forms make their home on the reef. Over 1,500 fish species, 4,000 mollusk species, 200 bird species, 16 sea snake species, and six sea turtle species thrive in the reef s tropical waters. The reef is also a habitat for the endangered dugong (sea cow), moray eels, and sharks. In addition to crawling with animal life, the coral reef offers the viewer a spectrum of brilliant colors and intricate shapes, a virtual underwater, writhing garden.

Although protected by the Australian government. Great Barrier Reef faces environmental threats. Crown-of-thorns starfish feed on coral and can destroy large portions of reel Pollution and rising water temperatures also threaten the delicate coral. Bui the most preventable of the hazards to the reef are tourists. Tourists have contributed to the destruction of the reef ecosystem by breaking off and removing pieces of coral to bring home as souvenirs. The government hopes that by informing tourists of the dangers of this seemingly harmless activity they will quash dais creeping menace to the fragile reef.
15. Which of the following statements does NOT describe the Great Barrier Reef?
(A) The Great Barrier reef is a colorful and active underwater structure.
(B) The Great Barrier Reef is a producer of small islands and landmasses.
(C) The Great Barrier Reef is threatened by vacationers.
(D) The Great Barrier Reef is the cause of much beachfront erosion in Northeastern Australia.
(E) The Great Barrier Reef is home to endangered sea turtles.

16 Based on information from the passage, $4,020 \mathrm{~km}$ would be approximately how many miles?
(A) 402
(B) 1,250
(C) 1,500
(D) 2,010
(E) 2,500
17. In line 5 of the passage, putrefaction most nearly means $\qquad$ .
(A) purification
(B) decay
(C) jettison
(D) liquefaction
(E) farming
18. The primary purpose of this passage is to $\qquad$ _.
(A) inform the reader that coral reefs are a threatened, yet broadly functioning ecosystem
(B) alert the reader to a premier vacation destination in the tropics
(C) explain in detail how the Great Barrier Reef is constructed
(D) recommend that tourists stop stealing coral off the Great Barrier Reef
(E) dispel the argument that coral is a plant, not an animal
19. According to the passage, all of the following are a threat to a coral reef EXCEPT $\qquad$ .
(A) tourists
(B) pollution
(C) erosion and putrefaction
(D) rising water temperatures
(E) Crown-of-thorns starfish

Passage5
Thomas. Chess, and Checkers stayed quiet for a long time. After a while, Chess and Checkers started to sing a Flathead song of mourning. Fora wake, fora -wake. Samuel was still alive, but Thomas sang along without hesitation. That mourning song was B-7 on every reservation jukebox.

After the song. Thomas stood and walked away from the table where his father lay flat as a paper plate. He walked outside and cried. Not because he needed to be alone; not because be was afraid to cry in front of women. He just wanted his tears to be individual, not tribal. Those tribal tears collected and fermented in huge BIA [Bureau of Indian Affairs] barrels. Then the BIA poured those tears into beer and Pepsi cans and distributed them back onto the reservation. Thomas wanted his tears to be selfish and fresh.
"Hello," be said to the night sky. He wanted to say the first word of a prayer or a joke. A prayer or a joke often sound alike on the reservation.
"Help," he said to the ground. He knew the words to a million songs: Indian. European. African. Mexican, Asian. He sang "Stairway to Heaven" in four different languages but never knew where that staircase stood. He sang the same Indian songs continually but never sang them correctly. He warned to make his guitar sound like a waterfall, like a spear striking salmon, but his guitar only sounded like a guitar. He wanted the songs, the stories, to save everybody.
20. Thomas, Chess, and Checkers are $\qquad$ _.
(A) Mexican
(B) European
(C) Asian
(D) African
(E) Native American
21. In line 2 , a wake means $\qquad$ .
(A) the turbulence left behind by something moving through water
(B) no longer asleep
(C) a viewing of a dead person before burial
(D) aftermath
(E) celebration
22. The fact that Thomas, Chess, and Checkers sing a song of mourning while Samuel is stillalive suggests that $\qquad$
(A) Samuel is afraid to die
(B) Samuel doesn't belong on the reservation
(C) Samuel's life is tragic
(D) they believe the song has healing powers
(E) Samuel is a ghost
23. Thomas wants his tears to be "selfish and fresh" (lines 10-11) because $\qquad$ .
(A) it is difficult for him to share his feelings with others
(B) he wants to mourn his father as an individual, not just as another dying Indian
(C) he feels guilty mourning his father before his father has died
(D) he doesn't think the tribe will mourn his father's passing
(E) tribal tears were meaningless
24. The sentence "Then the BIA poured those tears into beer and Pepsi cans and distributedthem back onto the reservation" (lines 9-10) is an example of $\qquad$ _.
(A) a paradox
(B) dramatic irony
(C) onomatopoeia
(D) flashback
(E) figurative language

## Passage6

The history of modern pollution problems shows that most have resulted from negligence and ignorance. We have an appalling tendency to interfere with nature
before all of the possible consequences of our actions have been studied in depth. We produce and distribute radioactive substances, chemicals, and many other potent compounds before fully comprehending their effects on living organisms. Our education is dangerously incomplete.
It is often argued that the purpose of science is to move into unknown territory, to explore, and to discover. It can be said that similar risks have been taken before, and that these risks are necessary to technological progress.

These arguments overlook an important element. In the past, risks taken in the name of scientific progress were restricted to a small place and a brief period of time. The effects of the processes we now strive to master are neither localized nor brief. Air pollution covers vast urban areas. Ocean pollutants have been discovered in nearly
every part of the world. Synthetic chemicals spread over huge stretches of forest and farmland may remain in the soil for decades. Radioactive pollutants will be found in the biosphere for generations. The size and persistence of these problems have grown with the expanding power of modem science.
One might also argue that the hazards of modern pollutants are small compared to the dangers associated with other human activity. No estimate of the actual harm done by smog, fallout, or chemical residues can obscure the reality that the risks are being taken before being fully understood.

The importance of these issues lies in the failure of science to predict and control human intervention into natural processes. The true measure of the danger is represented by the hazards we will encounter if we enter the new age of technology without first evaluating our responsibility to the environment.
25. According to the author, the major cause of pollution is the result of $\qquad$ .
(A) a lack of understanding of the history of technology
(B) scientists who are too willing to move into unknown territory
(C) changing our environment before understanding the effects of these changes
(D) not passing enough laws
(E) designing synthetic chemicals to kill living organisms
26. The author believes that the risks taken by modern science are greater than those taken by earlier scientific efforts because $\qquad$ .
(A) science is progressing faster than ever before
(B) the materials used are more dangerous to scientists
(C) the problems are greater
(D) technology has produced more dangerous chemicals
(E) the effects may be felt by more people for a longer period of time
27. The author apparently believes that the problem of finding solutions to pollution depends on $\qquad$ .
(A) overcoming technical difficulties
(B) the willingness of scientists to understand possible dangers before using new products in the environment
(C) the removal of all potential pollutants from their present uses
(D) a new age of science that will repair the faults of our present technology
(E) the removal of present hazards to the environment

28 The author seems to feel that the attitude of scientists toward pollution has been $\qquad$ .
(A) nonchalant
(B) ignorant
(C) concerned
(D) confused
(E) naive
29. The word synthetic means
(A) man-made
(B) progressive
(C) unsafe
(D) polluting
(E) new

## Passage7

In 1904, the U. S. Patent Office granted a patent for a board game called "The
Landlord's Game", which was invented by a Virginia Quaker named Lizzie Magie.
Magie was a follower of Henry George, who started a tax movement that supported the theory that the renting of land and real estate produced an unearned increase in land
values that profited a few individuals (landlords) rather than the majority of the people (tenants). George proposed a single federal tax based on land ownership; he believed
this tax would weaken the ability to form monopolies, encourage equal opportunity, and narrow the gap between rich and poor.

Lizzie Magie wanted to spread the word about George's proposal, making it more understandable to a majority of people who were basically unfamiliar with economics.
As a result, she invented a board game that would serve as a teaching device. The
Landlord's Game was intended to explain the evils of monopolies, showing that they repressed the possibility for equal opportunity. Her instructions read in part: "The
object of this game is not only to afford amusement to players, but to illustrate to them how, under the present or prevailing system of land tenure, the landlord has an
advantage over other enterprisers, and also how the single tax would discourage speculation."
The board for the game was painted with forty spaces around its perimeter, including four railroads, two utilities, twenty-two rental properties, and a jail. There were other squares directing players to go to jail, pay a luxury tax, and park. All properties were available for rent, rather than purchase. Magie's invention became very popular, spreading through word of mouth, and altering slightly as it did. Since it was not manufactured by Magie, the boards and game pieces were homemade. Rules were explained and transmuted, from one group of friends to another. There is evidence to suggest that The Landlord's Game was played at Princeton, Harvard, and the University of Pennsylvania.

In 1924, Magie approached George Parker (President of Parker Brothers) to see if he was interested in purchasing the rights to her game. Parker turned her down, saying that it was too political. The game increased in popularity, migrating north to New York state, west to Michigan, and as far south as Texas. By the early 1930s, it reached Charles Darrow in Philadelphia. In 1935, claiming to be the inventor, Darrow got a patent for the game, and approached Parker Brothers. This time, the company loved it, swallowed Darrow's prevarication, and not only purchased his patent, but paid him royalties for every game sold. The game quickly became Parker Brolhers' bestseller, and made the company, and Darrow, millions of dollars.

When Parker Brothers found out that Darrow was not the true inventor of the game, they wanted to protect their rights to the successful game, so they went back to Lizzie Magie, now Mrs. Elizabeth Magic Phillips of Clarendon, Virginia. She agreed to a payment of \$500 for her patent, with no royalties, so she could stay true to the original intent of her game's invention. She therefore required in return that Parker Brothers manufacture and market The Landlord's Game in addition to Monopoly. However, only a few hundred games were ever produced. Monopoly went on to become the world's bestselling board game, with an objective that is the exact opposite of the one Magie intended: "The idea of the game is to buy and rent or sell property so profitably that one becomes the wealthiest player and eventually monopolist. The game is one of shrewd and amusing trading and excitement."
30. In line 13, what does repressed the possibility for equal opportunity mean?
(A) Monopolies led to slavery.
(B) Monopolies were responsible for the single tax problems.
(C) Monopolies made it impossible for poorer people to follow Henry George.
(D) Monopolies were responsible for Lizzie Magie's \$ 500 payment and Charles Darrow's millions.
(E) Monopolies made it impossible for poorer people to have the same chances as the wealthy.
31. In line 33, what does swallowed Darrow's prevarication mean?
(A) Ate his lunch.
(B) Believed his lie.
(C) Understood his problem.
(D) Played by his rules.
(E) Drank his champagne.
32. In line 24, the statement that the rules of The Landlord's Game were explained andtransmuted relies on the notion that $\qquad$ -.
(A) when people pass along information by word of mouth, it goes through changes
(B) when people explain things to their friends, they take on a different appearance
(C) friends rely on one another for vital information
(D) it's not always easy to play by the rules
(E) word of mouth is the best way to spread information

33 In paragraph 4, the author implies that $\qquad$ _.
(A) Parker Brothers bought the game from Charles Darrow
(B) it is not difficult to get a patent for an idea you didn't invent
(C) Monopoly made Parker Brothers and Darrow millions of dollars
(D) Lizzie Magie tried to sell her game to George Parker
(E) The Landlord's Game was popular with Quakers
34. Why did Mrs. Phillips sell her patent to Parker Brothers?
(A) So a large company would market her game and spread the word about Henry George's single tax theory.
(B) So she could make money.
(C) So The Landlord's Game could compete with Monopoly.
(D) So the truth would be told about Charles Darrow.
(E) So she would become famous.
35. All of the following questions can be explicitly answered on the basis of the passage EXCEPT $\qquad$ ?
(A) Why did Lizzie Magie invent The Landlord's Game
(B) Was the object of The Landlord's Game
(C) What were some of the properties on The Landlord's Game board
(D) Who did Charles Darrow sell the game to
(E) How did Parker Brothers find out that Charles Darrow didn't invent the game

## Passage8

As he threw his head back in the chair, his glance happened to rest upon a bell, a disused bell, that hung in the room and communicated, for some purpose now forgotten, with a chamber in the highest story of the building. It was with great astonishment, and with a strange inexplicable dread, that, as he looked, he saw this
bell begin to swing. Soon it rang out loudly, and so did every bell in the house.
This was succeeded by a clanking noise, deep down below as if some person were dragging a heavy chain over the casks in the wine merchant's cellar. Then he heard the noise much louder on the floors below; then coming up the stairs; then coming straight toward his door.

It came in through the heavy door, and a specter passed into the room before his eyes. And upon its coining in, the dying flame leaped up, as though it cried, "I know him! Marley's ghost! "
36. The word inexplicable means $\qquad$ .
(A) without an expressed reason
(B) incapable
(C) not able to be taken out of
(D) explaining in simple terms
(E) eerie
37. The bell that began ringing $\qquad$ .
(A) could be rung from another room
(B) was attached to every bell in the house
(C) rested first on his glance
(D) was large and heavy
(E) did so by itself

38 The man who was listening to the bell $\qquad$ .
(A) was apparently very frightened
(B) was quite curious
(C) was Marley's ghost
(D) dragged a chain across the wine casks
(E) sat perfectly still
39. The word specter probably means $\qquad$ .
(A) clanking chains
(B) a hazy, recognizable vision
(C) strange noises
(D) a long-handled sword
(E) a bright light
40. The man in the story $\qquad$ .
(A) recognized Marley's ghost
(B) had been asleep
(C) set the room on fire
(D) first heard noises in his room
(E) is probably a wine merchant

| Verbal |  |  |  | Math 1 |  | Math 2 |  | Reading |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | C | 31 | C | 1 | D | 1 | B | 1 | D |
| 2 | A | 32 | B | 2 | C | 2 | C | 2 | E |
| 3 | B | 33 | E | 3 | E | 3 | D | 3 | C |
| 4 | C | 34 | A | 4 | C | 4 | D | 4 | E |
| 5 | C | 35 | C | 5 | C | 5 | B | 5 | A |
| 6 | B | 36 | A | 6 | B | 6 | E | 6 | B |
| 7 | E | 37 | D | 7 | B | 7 | B | 7 | D |
| 8 | D | 38 | D | 8 | B | 8 | E | 8 | B |
| 9 | D | 39 | E | 9 | C | 9 | B | 9 | C |
| 10 | D | 40 | A | 10 | B | 10 | C | 10 | A |
| 11 | D | 41 | B | 11 | B | 11 | A | 11 | E |
| 12 | B | 42 | E | 12 | D | 12 | B | 12 | C |
| 13 | E | 43 | E | 13 | D | 13 | B | 13 | B |
| 14 | E | 44 | E | 14 | C | 14 | C | 14 | B |
| 15 | E | 45 | C | 15 | C | 15 | E | 15 | D |
| 16 | A | 46 | C | 16 | D | 16 | C | 16 | E |
| 17 | B | 47 | B | 17 | A | 17 | E | 17 | B |
| 18 | D | 48 | D | 18 | C | 18 | B | 18 | A |
| 19 | D | 49 | D | 19 | E | 19 | D | 19 | C |
| 20 | E | 50 | B | 20 | B | 20 | E | 20 | E |
| 21 | D | 51 | E | 21 | D | 21 | A | 21 | C |
| 22 | D | 52 | E | 22 | D | 22 | C | 22 | C |
| 23 | D | 53 | C | 23 | D | 23 | B | 23 | B |
| 24 | E | 54 | E | 24 | D | 24 | D | 24 | E |
| 25 | D | 55 | C | 25 | E | 25 | C | 25 | C |
| 26 | D | 56 | A |  |  |  |  | 26 | E |
| 27 | E | 57 | D |  |  |  |  | 27 | B |
| 28 | A | 58 | B |  |  |  |  | 28 | A |
| 29 | B | 59 | C |  |  |  |  | 29 | A |
| 30 | A | 60 | B |  |  |  |  | 30 | E |
|  |  |  |  |  |  |  |  | 31 | B |
|  |  |  |  |  |  |  |  | 32 | A |
|  |  |  |  |  |  |  |  | 33 | B |
|  |  |  |  |  |  |  |  | 34 | A |
|  |  |  |  |  |  |  |  | 35 | E |
|  |  |  |  |  |  |  |  | 36 | A |
|  |  |  |  |  |  |  |  | 37 | E |
|  |  |  |  |  |  |  |  | 38 | A |
|  |  |  |  |  |  |  |  | 39 | B |
|  |  |  |  |  |  |  |  | 40 | A |

