GRE Practice Test

Contents

GRE Practice Test

Section One – Verbal
76 questions

Questions 1-7: Each of the questions below contains a sentence that has one or two blanks. The blanks stand for a part of the sentence that has not been included. Following each sentence are five answer choices. Choose the answer choice that best completes the sentence.

1. _____ disposing of an old refrigerator is often_____difficult. Some people abandon them at the landfill entrance.

  A. Responsibly…prohibitively

  B. Reasonably…curiously

  C. Diffidently…eminently

  D. Satisfactorily…completely

  E. Efficiently…impossibly

2. Women's baseball leagues became_____ during World War II, when many professional baseball players were_____ in the military.

  A. erratic…interested

  B. possible…enamored

  C. prevalent…engaged

  D. compatible…involved

  E. sporadic…integral

3. _____ writing, such as that found in *The New Yorker* magazine, tends to appeal to a particular group of_____ readers.

A. Interesting…refined

B. Gauche…stylish

C. Urbane…complicated

D. Flowery…educated

E. Exceptional…erudite

4. Mary Pickford was once one of the most_____ actors in Hollywood, so it is almost an oxymoron that she died a_____ at her estate.

A. wealthy…mogul

B. talented…extrovert

C. busy…retiree

D. eminent…recluse

E. famous…magnate

5. The book *Silent Spring* was published in 1962, and first exposed the_____ of using toxic chemicals to_____ crop-eating insects.

A. benefits…decimate

B. hazards…exterminate

C. convenience…massacre

D. trepidation…eliminate

E. vulnerability…eradicate

6. When Shirley Chisholm ran for the Democratic Party's nomination for president in 1972 her_____ was_____ for both African Americans and women.

A. attempt…unprecedented

B. bid…idiosyncratic

C. enthusiasm…exceptional

D. trepidation…singular

E. struggle…unparalleled

7. It is doubtful that an untrained adult would be able to master the⎯⎯⎯⎯⎯ of playing the harp in our orchestra without⎯⎯⎯⎯⎯ coaching from Anna Delgardo.

      A. intricacies...intensive

      B. minutiae...exhaustive

      C. workings...remedial

      D. information...demanding

      E. particulars...corrective

Questions 8-16: Listed beside each number below is a pair of words. Choose the pair of words that are the most similar to the example.

8. SKULK: STRIDE::

      A. bristle: fur

      B. cogitate: mull

      C. wheedle: coax

      D. whisper: talk

      E. precursor: antecedent

9. PROSELYTIZE: INDUCE::

      A. imbibe: remove

      B. flummox: explain

      C. displace: reposition

      D. repose: agitate

      E. dubious: decided

10. RETICULATE: HIGHWAY::

      A. funereal: sad

      B. canton: region

      C. itinerary: schedule

      D. ballot: election

      E. circuit: course

11. REDOUBTABLE: MOTHER::

      A. capricious: puppy

      B. narcissistic: teenager

      C. cherished: spouse

      D. stately: house

      E. congenial: child

12. JADED: IDEAS::

      A. invigorated: nap

      B. befuddled: puzzle

      C. bored: speech

      D. optimistic: inauguration

      E. anticipate: gift

13. IAMBIC: POETRY::

      A. syllables: word

      B. chapters: book

      C. words: speech

      D. rhythms: song

      E. dialects: language

14. HACKNEYED: REMARKS::

      A. novel: conjecture

      B. ludicrous: jokes

      C. bromidic: speech

      D. tacky: guise

      E. unique: perspective

15. CONTRIVE: ALIBI::

      A. excuse: behavior

B. dispel: naysayer

C. initiate: legislation

D. plagiarize: create

E. create: explanation

16. BEATIFIC: BRIDE::

A. plaintive: infant

B. petulant: puppy

C. dastardly: lion

D. despondent: clergy

E. delirious: fan

Questions 17-23 refer to the following passage. After reading the passage, read and respond to the questions that follow by selecting the best choice for each one.

Statins are a class of drugs that work to decrease the level of cholesterol in the blood. They are able to perform this function by effectively blocking the cholesterol-producing enzyme in the liver. In recent years, statins have increased in utility and popularity.

Although a certain amount of cholesterol is imperative for the human body to function, an elevated level can cause a precarious situation in the body. Cholesterol affixes itself to arteries, lining them and inhibiting blood flow. Since less blood can travel through those encumbered arteries, the blood flow to the heart is adversely affected. Scientists have found that the walls of arteries in the body can become inflamed from this plaque buildup. In many instances, the end result of this decreased blood supply and inflammation is a heart attack – sometimes a fatal one. In other cases the blood supply to the brain is compromised by the plaque buildup, often causing a stroke. Decreased blood flow to the legs can cause leg pains or cramps. In short, arterial plaque buildup is never a healthy situation.

Statins diminish the amount of cholesterol generated by the body. Although the drugs are not always able to reduce the amount of plaque that may

already be clogging arteries, they can slow the production of new plaque. The drugs are also able to stabilize the plaques that are already present and make them less likely to cause problems in the body.

Lowered cholesterol does not guarantee that a heart attack won't occur, but statin use will lower the risk for most patients. Not everyone who has a heart attack has high cholesterol levels, but most do have plaque formations on their arteries. It should be noted that the plaque is not always formed by high levels of cholesterol in the blood.

Statins are generally prescribed by doctors for people with elevated cholesterol levels. As the mean weight of the American population has risen, so has the number of individuals with high cholesterol. Millions of men and women in this country are prescribed statins in an effort to decrease the amount of cholesterol in their blood. Remarkably, these effects can be seen in as little as two weeks after beginning a statin regime.

17. The author's main point is that:

    A. Cholesterol can cause heart attacks.

    B. Statins can diminish the amount of cholesterol in the blood.

    C. Most people have plaque buildup in their arteries.

    D. Statins are not able to decrease the amount of plaque lining the arteries.

    E. Heart attacks are not the only danger of high cholesterol.

18. Which of the following does the author imply about statins?

    I. They can be lifesaving drugs.

    II. They are overprescribed by doctors.

    III. They are expensive drugs to produce.

    A. I only

    B. II only

    C. III only

    D. I and II only

    E. II and III only

19. Which of the following is suggested about the American population?

    A. Their life expectancy has decreased in the past few decades.

    B. They don't get enough exercise.

    C. Their diet may be affecting their cholesterol levels.

    D. They want an easy fix for a difficult problem.

    E. There are a record number of heart disease deaths in the United States.

20. According to the article, which of the following is true of statins?

    I. They can help rid the arteries of dangerous plaque.

    II. They are able to affect the body relatively quickly.

    III. They are an inexpensive drug.

    A. I only

    B. II only

    C. III only

    D. I and II only

    E. II and III only

21. According to the article, which is true of cholesterol?

    I. A certain amount of cholesterol is needed by the body.

    II. Cholesterol may be dangerous to the body.

    III. A low cholesterol level means a person likely won't have a heart attack.

    A. I only

    B. II only

    C. III only

    D. I and II only

    E. II and III only

22. The author concedes that statins' job is primarily to:

    A. slow the production of cholesterol in the body.

    B. eliminate the possibility of a heart attack.

C. increase the amount of blood flowing to the heart.

D. attack the cholesterol in the human body.

E. improve the condition of a person's arteries.

23. The author organizes the passage by:

A. enumerating reasons why statins are useful drugs.

B. debating the importance of statins.

C. criticizing the American public's diet and health.

D. outlining ways to reduce cholesterol in the blood.

E. discussing ways doctors treat high cholesterol.

Questions 24-27 refer to the following passage.

One way to deliver news is with a photograph. Well-placed images can enhance and further explain details of news stories while impacting the viewer emotionally. Indeed, the main goal of a news photograph is not necessarily to be aesthetically pleasing, but to objectively deliver the news by way of a graphic image.

Interpreting the news through photographs is not an effortless task, even for the experienced photojournalist. What separates a good news photograph from a typical photo is that a good one will not just be a picture. It will be a complete sentence, with a subject, a verb, and a verb object. It won't just say "the dog" or "the boy," but it will say, "The dog saved the boy and seemed to know what it was doing." Good photographs won't be posed or set up, but will be a slice of the news story as it happens.

Most professional photojournalists know that the best photographs they can take are those that are able to provoke emotion. A snapshot is not simply taken of a plane that has been involved in a runway crash. A good photojournalist will try to find a way to show a part of the story: a distraught person, an ice-plagued runway, or even a spent firefighter. This can mean time invested waiting around for the right moment and the right photograph.

Professional photojournalists know and expect this, and know that it is time well spent when they get the shot that shows the story.

24. The author's main point is that:

    A. it's not easy to take a good photograph.

    B. photojournalists are professionals.

    C. photographs are an important part of the news.

    D. news photographs are not just pictures.

    E. it's wrong to pose a news photograph.

25. Which of the following does the author imply about photojournalism?

    I. It's not as easy as it looks to take a news photograph.

    II. Most photojournalists have strong relationships with those they photograph.

    III. Most people can be taught to take a good photograph.

    A. I only

    B. II only

    C. III only

    D. I and II only

    E. II and III only

26. Which statement is true about an objectively delivered news photograph?

    I. It shows the photographer's feelings about the subject.

    II. It may show the photographer's personal bias.

    III. It will be devoid of the photographer's feelings.

    A. I only

    B. II only

    C. III only

    D. I and II only

    E. II and III only

27. As implied by the passage, which part of speech does a good photograph mainly capture?

        A. adverb

        B. noun

        C. adjective

        D. verb

        E. preposition

Questions 28-38: Each question below begins with one word written in capital letters. Read the five answer choices that follow and choose the one that most nearly means the opposite of the original word.

28. PRIORY:

        A. residence

        B. depot

        C. rectory

        D. convent

        E. monastery

29. RECREANT:

        A. turncoat

        B. loyalist

        C. apostate

        D. craven

        E. renegade

30. OBLITERATE:

        A. reinstate

        B. obscure

        C. efface

D. extirpate

E. excise

31. DOGMA:

    A. ism

    B. tenet

    C. doctrine

    D. philosophy

    E. fact

32. SUPERCILIOUS:

    A. disdainful

    B. diffident

    C. haughty

    D. prideful

    E. stuffy

33. EFFULGENT:

    A. leaden

    B. beaming

    C. radiant

    D. brilliant

    E. refulgent

34. ABSCOND:

    A. escape

    B. evade

    C. capitulate

    D. bolt

    E. decamp

35. ATTENTUATE:

      A. fortify

      B. dissipate

      C. subvert

      D. devitalize

      E. diminish

36. DISCORDANT:

      A. unresolved

      B. dissonant

      C. inharmonic

      D. disparate

      E. symmetrical

37. EXACERBATE:

      A. deteriorate

      B. acerbate

      C. aggravate

      D. exasperate

      E. mollify

38. GARRULOUS:

      A. loquacious

      B. diffident

      C. prolix

      D. blabby

      E. forthcoming

Questions 39-45: Each of the questions below contains a sentence that has one or two blanks. The blanks stand for a part of the sentence that has not been included. Following

each sentence are five answer choices. Choose the answer choice that best completes the sentence.

39. After an interview with the suspect, most of the detectives agreed that her explanation for possessing the contraband was_____ .

    A. supercilious

    B. appropriated

    C. arresting

    D. insipid

    E. fabricated

40. The insurance adjuster asked us to_____ the value of our damaged equipment.

    A. extrapolate

    B. embroider

    C. equivocate

    D. acerbate

    E. hyperbolize

41. The producer thought the young, frail girl would be_____ and unfit for the lead role, but she turned out to be a_____ performer.

    A. reticent…gregarious

    B. demonstrative…candid

    C. aloof…restrained

    D. frank…detached

    E. unconstrained…taciturn

42. The family didn't realize that the abused dog they adopted would be so_____ . They had to give him up.

    A. jocund

    B. truculent

    C. blithe

D. convivial

E. pretentious

43. Because he was＿＿＿＿＿＿Jay sat in the back of the lecture hall and kept his eyes trained on his notebook as the professor asked for volunteers.

A. sanguine

B. impudent

C. brazen

D. diffident

E. presumptuous

44. It is very difficult to＿＿＿＿＿＿all of the facts without first figuring out some kind of ＿＿＿＿＿＿system to remember them.

A. surmise…arduous

B. evade…rudimentary

C. imbibe…mnemonic

D. conjecture…facile

E. challenge…abstruse

45. It was looking increasingly likely that one person was responsible for spreading the ＿＿＿＿＿＿strain of the flu that overtook the university campus.

A. tedious

B. benign

C. clement

D. virulent

E. repugnant

Questions 46-54: Listed beside each number below is a pair of words. Choose the pair of words from the answer choices that are the most similar to the example.

46. ELOCUTION: ANNOUNCER::

A. slatternly: model

B. diligence: surgeon

C. belligerent: boxer

D. nimbleness: sloth

E. dissonance: singer

47. SENTINEL: MASTERPIECE::

A. recidivist: penitentiary

B. chaperone: minor

C. sculptor: chisel

D. apostate: patriot

E. perfunctory: signal

48. PRAGMATISM: APPROACH::

A. malleable: transformable

B. insolence: contempt

C. negotiate: settle

D. innocuous: harmless

E. ignominy: disgrace

49. TEMPORAL: POSSESSIONS::

A. cadaver: corpse

B. conceive: formulate

C. foresee: anticipate

D. immortal: soul

E. astral: stellar

50. BANAL: SERMON::

A. mundane: lecture

B. insolent: personality

C. amenity: minion

D. enthrall: storyteller

E. regale: movie

51. LOQUACIOUS: GOSSIP::

    A. prickish: toddler

    B. clandestine: operative

    C. penitent: criminal

    D. taciturn: orator

    E. demonstrative: barker

52. LEXICON: EDITOR::

    A. vitality: physician

    B. repertoire: actor

    C. notes: singer

    D. pen: architect

    E. aqueduct: sailor

53. PERVIOUS: FOOTPATH::

    A. sentry: prison

    B. besiege: city

    C. way: thoroughfare

    D. insuperable: difficulties

    E. effulgent: sunshine

54. EQUITABLE: HALVES::

    A. unique: experience

    B. unwieldy: package

    C. aberration: sculpture

    D. anomaly: routine

    E. compatible: uniform

Questions 55-57 refer to the following passage. After reading the passage, read and respond to each question selecting the best answer choice for each one.

A humanist is often described as a person with a clear ability to regulate his or her own behavior. The goal of humanists is to cherish life as they search for their individual place and objective, then to embrace that purpose. Humanists direct their own lives, and employ free choice in their thoughts, actions, and interactions with others. They tend to believe that a person's main ambition should be to cherish and seek purpose in life. Humanists believe other people should make their own decisions and trust themselves to set their own direction. Most humanists believe that this type of free-thinking approach culminates in true personal growth since each person will move at a pace most attuned to individual comfort levels.

Humanists are likely to have a positive view of themselves and true confidence in their abilities. They base their life decisions on what they may have already experienced, what they know of history, and how they apply reason. They are convinced that they are always moving in a positive direction and, for this reason, they generally don't fear death. Although they don't believe in an afterlife, they know that if they follow their beliefs, by the end of their life they will have had a complete journey.

55. According to the passage, which is a true statement about humanists?

I. Humanists are generally stagnant in maturity.

II. Humanists depend on others to help them make sound decisions.

III. Humanists work toward fulfilling their seity.

A. I only

B. II only

C. III only

D. I and II only

E. II and III only

56. Which of the following best describes the type of personality characteristic a person described as a humanist would most likely possess?

    A. introversive

    B. apprehensive

    C. daunted

    D. sanguine

    E. haughty

57. The passage suggests that a humanist believes that after his life is over:

    A. he will be rewarded in the hereafter.

    B. he will no longer be relevant.

    C. he will have culminated his journey.

    D. his ideas will be important to others.

    E. his journey has just commenced.

Questions 58-65 refer to the following passage.

        Chlorine is a mainstay in most swimming pools in the United States, and is used to eradicate bacteria. A bacteria-free pool will usually ensure that swimmers won't contract a serious illness if they spend time in, and possibly ingest, the water.

        When chlorine is added to pool water, a chemical reaction occurs whereby the chlorine breaks down into a legion of chemicals that combine to kill bacteria that may be in the water. These chemicals, specifically hypochlorous acid and hypochlorite ion, eliminate bacteria by annihilating and then oxidizing the abhorrent cells. When this chemical reaction occurs, the bacteria are rendered essentially harmless. This chemical reaction doesn't occur immediately – individual components within chlorine take varying amounts of time to interact with the bacteria, creating an almost time-release-type of kill in the pool water.

        Chlorine must be regularly replenished. As they react, the hypochlorous acid and hypochlorite ion combine to create a particular acceptable pH level in

the pool water. A pH is a measure of the alkalinity and acidity present; a pH value of 7 represents a neutral value, and 7.4 is the pH value of the human tear. The pH ratio must be regularly monitored to ensure a consistent optimum rate – one usually kept within the spectrum of 7 to 8 as measured by a reliable pH measuring kit.

As the chemicals in chlorine complete their reactions, they break down and are no longer effective in keeping the pool water neutralized. Additional chlorine must be added to water at specific times. Outdoor pools that are in direct sunlight need to have water added more often because the chemical reaction time for chlorine is increased and its effectiveness is reduced in these conditions.

Since the hypochlorite ion is an especially potent chemical capable of fading fabrics and paint, most people are meticulous about rinsing chlorine from potentially affected areas. Although chlorine is inexpensive and widely available, some people find the bleach smell to be repugnant and the distinct aroma present at many swimming pools to be overwhelming. These people may not be able to enjoy aquatic pursuits in those pools that employ chlorine as a cleansing agent. Other people may find that inhaling chlorine at the high levels present around some pools may be difficult to tolerate. Still others may experience skin irritation after swimming in a pool containing chlorine. Although there are other chemicals and compounds available to clean swimming pools, they may be prohibitively expensive or incapable of killing all types of bacteria present in the water.

58. All of the following statements are true about chlorine EXCEPT:
    A. Chlorine's efficacy is affected by sunlight.
    B. Chlorine is made up of two chemicals: hypochlorous acid and hypochlorine ion.
    C. Chlorine is usually said to be malodorous.
    D. Chlorine levels must be routinely assessed in pool water.
    E. Chlorine affects the pH level of water. All of all of the following

59. According to the passage, a stable pH value in pool water is dependent upon which of the following:

        A. Ensuring that there is only a minimum amount of bacteria in the water

        B. Monitoring and adding chlorine when warranted

        C. Paying close attention to the reactions of chemicals in the pool water

        D. Ensuring that water is protected from direct sunlight

        E. Having a bacteria-free pool

60. The author's primary purpose is to:

        A. offer an unbiased opinion of chlorine's efficacy.

        B. provide an argument for using chlorine.

        C. discuss the chemical reaction taking place within a pool.

        D. show how chlorine can keep pool water safe.

        E. suggest alternatives to keeping a pool clean.

61. In paragraph 5, line 3, *repugnant* most nearly means

        A. bearable

        B. offensive

        C. extrinsic

        D. pleasant

        E. congenial

62. Based on the passage, which statement is probably NOT true of chlorine?

        A. It can be harmful if swallowed.

        B. Occasional high levels in pool water are probably not harmful.

        C. It can kill most common types of pool water bacteria.

        D. A pool's size will dictate the amount needed.

        E. It won't affect the color of the pool water.

63. The author includes the information about the pH of human tears mainly to:

        A. give the reader a base of reference.

B. provide a visual image for the reader.

C. personalize the passage to enhance interest.

D. answer the reader's anticipated question.

E. summarize how pH is calculated.

64. Based on the information in the passage, which of the following statements is true about keeping pool water neutralized?

> *I. Bacteria are kept at a tolerable level.*
>
> *II. Chlorine is being added at regular intervals.*
>
> *III. The pH level is being constantly monitored.*

A. I only

B. II only

C. III only

D. I and II only

E. II and III only

65. As used in paragraph 1, line 1, eradicate most nearly means:

A. exterminate

B. adulterate

C. vitiate

D. exacerbate

E. enervate

Questions 66-76: Each question below begins with one word written in capital letters. Read the five answer choices that follow and choose the one that most nearly means the opposite of the original word.

66. BURGEON:

A. abate

B. blossom

C. compound

D. augment

E. manifold

67. VOLATILE:

A. variable

B. elastic

C. flighty

D. flippant

E. uniform

68. OBLOQUY:

A. disgrace

B. laud

C. mishandle

D. exploit

E. decry

69. CACOPHONY:

A. dissonant

B. raucous

C. consonant

D. inharmonious

E. rude

70. INSIDIOUS:

A. treacherous

B. wily

C. toxic

D. candid

E. perfidious

71. INEXORABLE:

      A. resolute

      B. steadfast

      C. stubborn

      D. compliant

      E. immobile

72. IMPEDE:

      A. hinder

      B. forestall

      C. overslaugh

      D. bar

      E. cooperate

73. PLAINTIVE:

      A. lamenting

      B. exalting

      C. melancholy

      D. deploring

      E. piteous

74. REPROOF:

      A. eulogize

      B. reproach

      C. chide

      D. admonish

      E. rebuke

75. ANOMALOUS:

      A. singular

      B. exceptional

C. foreign

D. prodigious

E. customary

76. VERITY:

A. accuracy

B. veracity

C. authenticity

D. misrepresentation

E. frankness

Section Two – Quantitative

60 questions

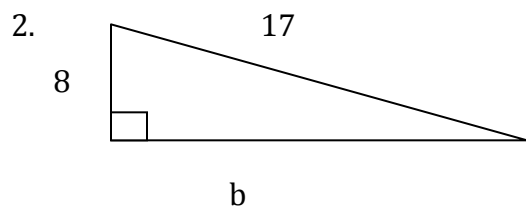***Questions 1-15***: Each question shows a quantity in Column A and a quantity in Column B. Compare the two quantities and indicate whether:

      A. The quantity in Column A is greater.

      B. The quantity in Column B is greater.

      C. The two quantities are equal.

      D. The quantities cannot be compared from the information provided.

1. Ann's class has *x* students this semester. Paul's class has one less than three times the number of students in Ann's class.

Column A	Column B
x^2	$2x$

      A. The quantity in Column A is greater.

      B. The quantity in Column B is greater.

      C. The two quantities are equal.

      D. The quantities cannot be compared from the information provided.

2.

Column A	Column B
b^2	289

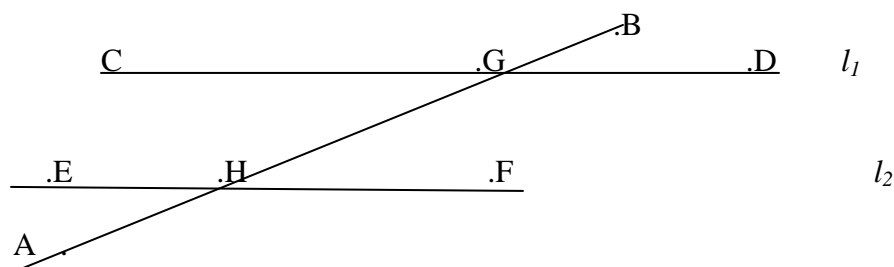A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

3. Isosceles triangle △ DEF has a perimeter of 24 and side DE has a length of 12.

Column A	Column B
Side EF	Side DF

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

Questions 4 and 5 both refer to the figure below.

4.

Column A	Column B
<CGB	<DGH

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

5.

Column A	Column B
<CGB + <CGH	<BGD + <DGH

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

6. Recorded attendance at weekly seminars in the first quarter of the year has been:

 117, 103, 109, 100, 125, 115, 120, 126, 130, 106, 109, 125

Column A	Column B
the median	the average

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

7. $6 - 4x > 3$

Column A	Column B
x	1

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

8.

Column A	Column B
1/2 times the perimeter of a triangle	The perimeter of a square with a side of 3 cm; 8 cm; 14 cm.; 3.2 cm.

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

9.

Column A	Column B
The number of new three digit numbers that can be formed by using the digits 413 once	6

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

10.

Column A	Column B
The probability of throwing an even number on a fair, six-sided die	$\frac{6}{3}$

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

11.

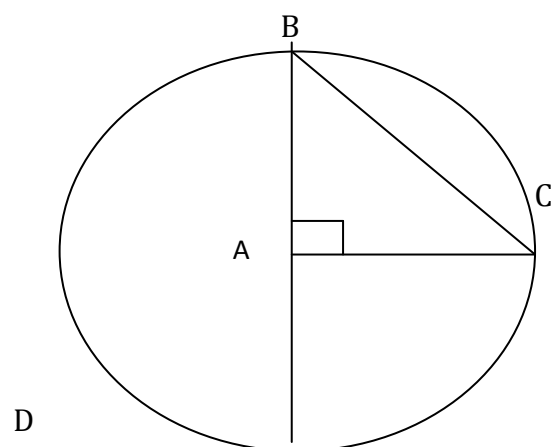| Column A	Column B
The least common multiple of 267 and 1782	The least common multiple of 252 and 1330

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

12. Consider these two expressions:

$$4x - 3y = 8 \quad -2x + 5y = 10$$

Column A	Column B
The value of x + y	9

A. The quantity in Column A is greater.

B.The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

13.

Column A	Column B
The length of a rectangle with a perimeter of 40.8 cm	The perimeter of a square with a side of 3.5 cm

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

14.

A is the center of the circle; BD = 17 cm.

Column A	Column B
AD	BC

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

15.

Column A	Column B
$\dfrac{\frac{1}{2} \times \frac{2}{5}}{3}$	$\dfrac{\frac{1}{6} \times \frac{3}{4}}{2}$

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

Questions 16-30: Choose the letter that best answers the question.

16. What is the sum of the integers from 13 to 75, inclusive?

    A.2184

    B.2279

    C.2332

    D.2376

    E.2385

17. The ratio of empty to full parking spaces is 3 to 5. If there are 940 full parking spaces in the lot, how many spaces are empty?

    A.156

    B.376

    C.470

    D.564

    E.602

18. Charles is able to husk 216 ears of corn in 2 ½ hours. What was his rate per minute?

    A.1.44

B.5.4

C.14.4

D.54

E.144

19.

21 cm

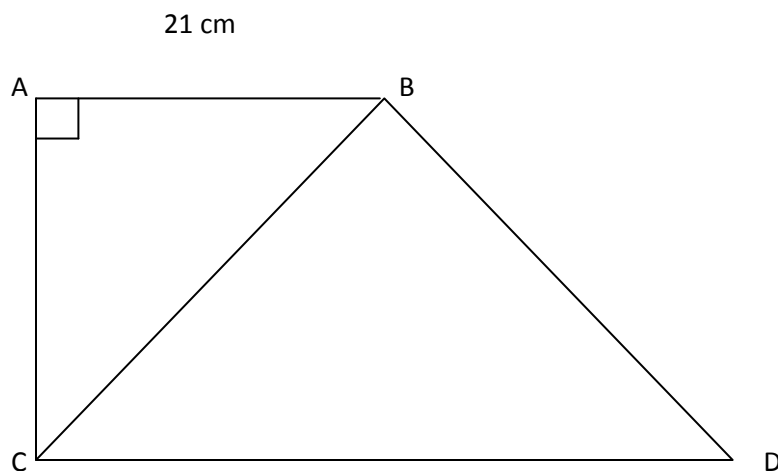A   B

C   D

The perimeter of triangle ABC is 84
The perimeter of isosceles triangle BCD is 110
What is the length of CD?

A.30

B.35

C.40

D.42

E. It can't be determined from the information provided.

20. Which two of the following fractions are equal?

I.$\dfrac{0.040}{0.108}$

II.$\dfrac{0.40}{0.180}$

III.$\dfrac{0.40}{0.018}$

$$\text{IV.} \frac{0.004}{0.0018}$$
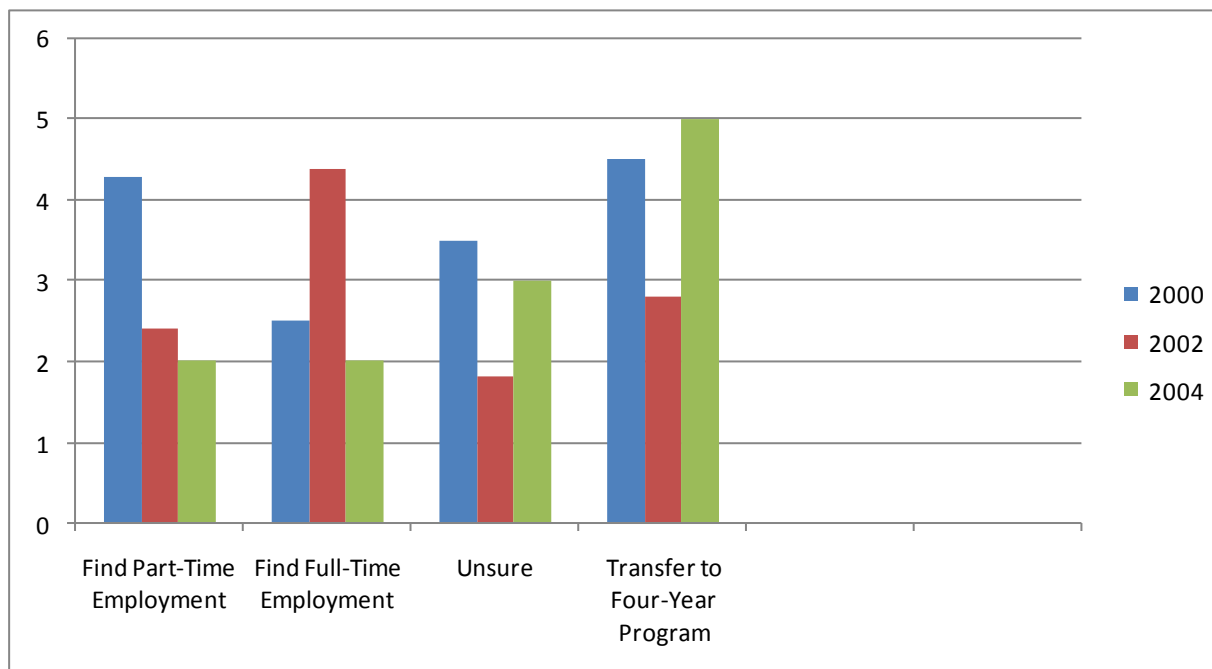
A.I and II

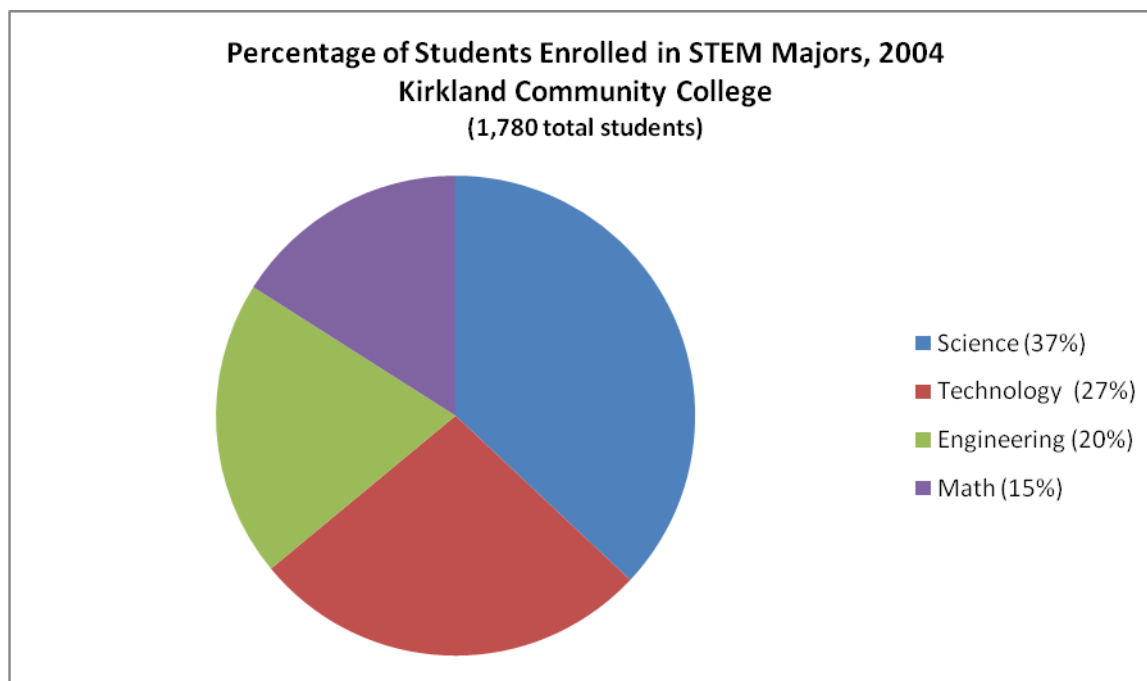B.II and III

C.I and III

D.II and IV

E.I and IV

Questions 21-25 refer to the charts below:

Future Plans for Graduating Liberal Arts Majors at Kirkland Community College, 2000-2004 (in hundreds)

21. With respect to what students plan to do after receiving their liberal arts degree, what area has experienced the greatest growth from 2000 to 2004?

     A. Finding part-time employment

     B. Finding full-time employment

     C. Unsure

     D. Transferring to a four-year program

     E. It can't be determined from the information provided.

22. Which statement is true about comparing the enrollment of students in the liberal arts major from 2000 and 2004?

     A. The enrollment rose by about 300 students.

     B. The enrollment declined by about 300 students.

     C. The enrollment rose by about 30 students.

     D. The enrollment declined by about 30 students.

     E. None of the above statements are true.

23. What percentage of students were unsure of their future plans in 2004?

     A.10%

     B.20%

     C.25%

     D.40%

     E.45%

24. Of the total number of students enrolled in the science, technology, engineering, and math (STEM) majors, how many are not enrolled in a math major?

     A. 267

     B. 304

     C.1513

     D.1765

     E. It can't be determined from the information provided.

25. Twenty-five new students enrolled in the school due to a recruiting effort by the engineering department. How is the percentage of engineering students enrolled in STEM majors affected?

     A. It is now about 21%.

     B. It is now about 25%.

     C. It is now about 30%.

     D. The percentage is the same.

     E. It can't be determined from the information provided.

26. After declining 6%, the student body at a particular university totals 22,278 students. What was the size of the student body before the decline?

     A. 22,936

     B. 23,212

     C. 23,700

     D. 24,643

     E. 37,121

27. What is the slope of a line that contains the points (3,7) and (8, -2)?

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

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

     C. $\dfrac{-5}{11}$

     D. $\dfrac{11}{-9}$

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

28. A person invests $18,000 at 4% simple annual interest. How much interest has been earned after four months?

     A. $60

     B. $180

     C. $240

D. $360

E. $720

29. After taking five tests, one student's average grade is 65. If the student scores 83 on his next test, what will his new average be?

A.65

B.68

C.74

D.78.8

E.81.6

30. Group A's average weight is 162 pounds. Group B's average weight is 156 pounds. There are twice as many people in Group B as in Group A. What is the overall average weight?

A.158

B.159

C.160

D.162

E.163

Questions 31-45 show a quantity in Column A and a quantity in Column B. Compare the two quantities and indicate whether:

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

31.

Column A	Column B
The number of pebbles in a box	The number of pebbles in a bag

weighing 5 kilograms	weighing 7 kilograms

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

32. Test scores for one student this semester are:

76, 87, 100, 93, 65, 58

Column A	Column B
The range	The average

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

33. After decreasing 17% over the past decade, the population of deer in a rural area is 498.

Column A	Column B
The original population of deer	600

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

34. When x is divided by 9, the remainder is 4.

Column A	Column B
4	The remainder when $3x$ is divided by 9

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

35. The first 200 pages of a biography mention John Doe by name an average of four times per page. The remaining 125 pages mention his name six times per page.

Column A	Column B
5	The average number of times John Doe's name is mentioned in 325 pages

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

36. After a flood, the ratio of dogs to horses in an emergency animal shelter is 5:2. The ratio of horses to cats is 3:7. There are 30 dogs at the shelter.

Column A	Column B
25	The number of cats at the shelter.

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

37. Six pounds of grapes cost $1.69 a pound. Four pounds of strawberries cost $2.19 a pound. A mixture of these grapes and strawberries is available for sale at a lunch buffet.

Column A	Column B
Cost per pound of the mixture	$2

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

38. Of 150 people at a resort, 105 have previously visited Mexico, 34 have previously visited Jamaica, and 40 people have previously visited neither place.

Column A	Column B
The number of people who have visited both Mexico and Jamaica	25

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

39. **Snowfall in inches for the four weeks of January**

	Week 1	Week 2	Week 3	Week 4
City *x*	15	16	7	2
City *y*	8	9	17	6

Column A	Column B
The standard deviation of snowfall for city x	The standard deviation of snowfall for city y

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

40.

Column A	Column B
$3^6 \times 3^y$	3^{6+y}

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

41.

Column A	Column B
$(2^x)^0$	1

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

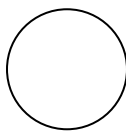D. The quantities cannot be compared from the information provided.

42. $x^2 + 8 = 6x$

Column A	Column B
x	5

A. The quantity in Column A is greater.

B. The quantity in Column B is greater.

C. The two quantities are equal.

D. The quantities cannot be compared from the information provided.

43.

Column A	Column B
The positive difference between the sixth and fifth numbers in the sequence 3, 7, 8 whose n^{th} term is $n^2(n)$	90

44.

Sphere A

r = 3 cm.
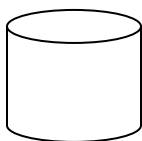
Column A	Column B
Volume of sphere A	113.04 cubic centimeters

45.　　　　　　Cylinder B

radius = 6'

height = 3'

Column A	Column B
Volume of cylinder B	350 cubic feet

Choose the letter that best answers the question.

46. In a math class, all except four students scored below 65 on a math test. If 14 students scored below 60 on the test, how many students are in the math class?

　　A. 22

　　B. 28

　　C. 30

　　D. 32

　　E. It can't be determined from the information given.

47. What is the average of all the integers from 16 to 68?

　　A. 41

B. 41.5

C. 42

D. 42.5

E. 43

48. The ratio of riders to commuter buses is 36 to 4. If there are 8,100 riders, how many buses are there?

    A. 56.25

    B. 90

    C. 225.2

    D. 900

    E. 990

49. George walked 23,760 steps in 33 hours. What was his rate per minute?

    A. 12

    B. 20.5

    C. 39.6

    D. 45

    E. 90

50. Rewrite $8 - 4y > 6$ in its simplest form.

    A. $y > \frac{1}{2}$

    B. $y > 2$

    C. $y < \frac{1}{2}$

    D. $y < 2$

    E. $y = 2$

51. If $/y - 6/ < 10$ what is the range of possible values for y?

    A. $-4 < y < 16$

B. $4 < y < -16$

C. $16 < y < -4$

D. $16 < y < -4$

E. $16 < -y < 4$

52. Find the area of a circle with a circumference of 10π.

    A. $5\ \pi$

    B. $10\ \pi$

    C. $15\ \pi$

    D. $20\ \pi$

    E. $25\ \pi$

53. What is the slope of the line that contains the points (1,3) and (4,-3)?

    A. -2

    B. -0.5

    C. 1

    D. 2

    E. 3

54. The price of corn rose 20% two years ago and 15% last year. What is the combined percent increase in price?

    A. 5%

    B. 17.5%

    C. 25%

    D. 35%

    E. 38%

55. Solve: $16^{1/2} + x^{1/3}$

    A. $4 + \sqrt[3]{x}$

    B. $8 + 3x$

C.$4 - x^3$

D.$8 - x^3$

E.$4 - \sqrt[3]{x}$

56. Find $x + y$

$$-3x - 2y = 14 \qquad 4y + 5x = 10$$

    A. 8

    B. 10

    C. 12

    D. 24

    E. 36

57. What is the minimum value of the function $f(x) = x^2 + 2$?
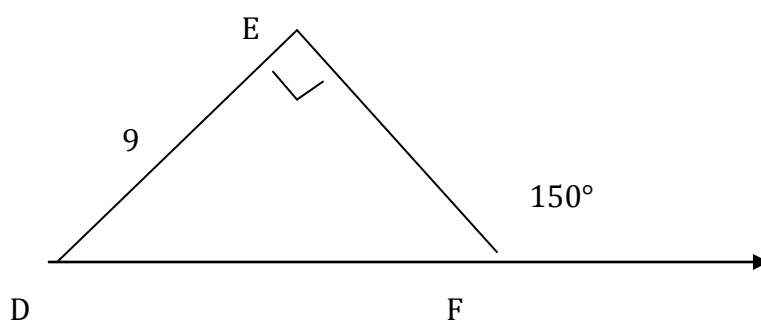
    A. 1

    B. -2

    C. 2

    D. -3

    E. 3

58.

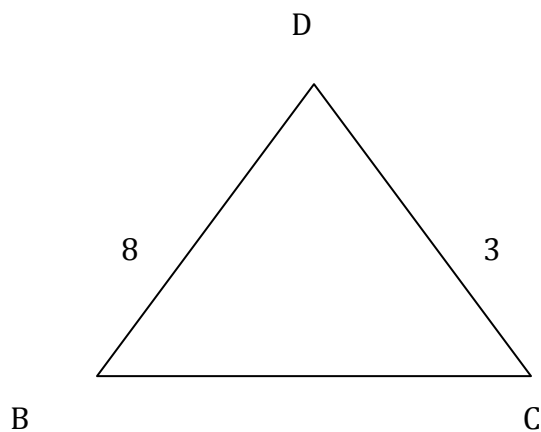What is the length of DF given the information above?

    A.3

    B.9

    C.12

D.15

E.18

59.

The perimeter of triangle BCD is 14. What is its area?

A.8

B.10

C.12

D.20

E.24

60. A copy machine can create 18 copies in 30 seconds. How many copies will it create in 215 seconds?

A.126

B.129

C.134

D.139

E.146

Section Three – Analytical Writing

Essay 1 – Issue

Directions: There are 45 minutes allotted for this part of the section. In that time, you will plan and write an essay that explains your point of view on an assigned topic. Choose one of the two topics below. You are not allowed to write about any other topics.

The topic is a short quotation about an issue. You will write an essay about the issue – agreeing with it, disagreeing with it, or qualifying the quote. Support your opinion with what you know from your studies, your own observations, readings, or other sources.

Ensure that you have fully developed your ideas and that your essay is well-organized. You will want to make sure you have time to review and revise your work, so plan accordingly.

1. *A preoccupation with the future not only prevents us from seeing the present as it is but often prompts us to rearrange the past.* (Eric Hoffer, The Passionate State of Mind, 1954)
2. *Never let the future disturb you. You will meet it, if you have to, with the same weapons of reason which today arm you against the present.* (Marcus Aurelius Antonius, Mediations, 200 A.D.)

Essay 2: Argument

Directions: There are 30 minutes allotted for this part of the section. Here, you will explain how logical you believe the argument below seems. As you consider your argument, take care to analyze what the speaker is saying, the rationale, and use of evidence. Think about and explain how to make the argument more valid or how its conclusion could be better stated.

This opinion was argued at a recent economic policy meeting:

> *People should be able to will their social security fund earnings to their survivors. Social Security is run like a giant Ponzi-type scheme. (Years ago, Charles Ponzi conducted an investment swindle whereby early investors were paid returns with money provided by later investors.) All workers, some involuntarily, contribute money to the social security system at regular intervals during their entire working life. Retired people, disabled children and adults, and minors who have lost a head of household are all given a monthly check, the amount of which is largely based on what they have paid into the fund. The only reason these people are able to be paid is that money continues to be pumped into the system.*
>
> *This system may work well, but some people are never able to draw from their contributions to social security. They may work for ten years and die, or they may work their entire life and die just at the time they have retired. This is unfair. People should be able to will their social security fund earnings to their survivors.*

Answer Key

Section One - Verbal

Often, one of the two words can be eliminated from a pair and the response can be disregarded. Whenever possible, attempt to eliminate answers to make finding the correct response as efficient as possible.

1. The correct answer is (A). We know that a large appliance should be disposed of properly, but based on its size it will often be difficult.
(B) – *Reasonably* disposing of the refrigerator does not make sense since it is not clear what reasonably means in this context. This response can be disregarded immediately. (C) – *Diffidently* means quietly or shyly. A refrigerator wouldn't ordinarily be *quietly* disposed of. (D) – A refrigerator may need to be disposed of in a *satisfactory* way, but it is not completely difficult. Rather, it may be difficult at some stages of disposal. (E) – A refrigerator may be *efficiently* disposed of, and it is not impossible to do this.

2. The correct answer is (C). These leagues became very popular when many men were fighting in World War II.
(A) – *Erratic* means that something is inconsistent. This doesn't describe most sports leagues, so this would not be the best response. (B) – The leagues were made possible by the absence of male players, but these men were rarely *enamored,* or charmed, by the military. (D) – *Compatible* means that the leagues were similar, or well matched. This is an odd way to describe a baseball league. (E) – *Sporadic* means that something is irregular or happens once in a while. When paired with *integral*, a word that means vital, this response does not work as well as the first one. Of course, men *were* vital to the military, but this doesn't explain why the leagues would be sporadic.

3. The correct answer is (E). Exceptional writing would probably most appeal to well-educated, or *erudite*, readers.

(A) – Describing writing as *interesting* really doesn't tell much about it. It doesn't identify, for example, who it is actually interesting to. (B) – *Gauche* means that the writing is vulgar and tasteless. Even if you weren't familiar with the type of writing *The New Yorker* is known for, you would know that stylish people generally don't enjoy vulgar writing. (C) – *Urbane* writing is sophisticated, which could describe the type of writing in this magazine, but referring to readers as *complicated* does not describe them very well. (D) – *Flowery* means that something is ornate or elaborate, and would not describe the style of writing typically found in a magazine.

4. The correct answer is (D). The word *oxymoron* in the sentence tells you that the two words in the response will contradict each other. To say that she was an *eminent*, or well-known, actor contradicts the statement that she was a *recluse*, or hermit, at the end of her life.

(A) – A wealthy person is often a mogul, so there is nothing in this statement that could be considered an oxymoron. (B) – It is not a contradiction for a talented person to be an extrovert. (C) – Saying a person is *busy* does not contradict the statement that they are a *retiree*. (E) – A *famous* person may be a *magnate*. These words do not contradict each other.

5. The correct answer is (B). The statement implies that the book told something new about toxic chemicals and crop-eating insects. It can be inferred (even if you are not familiar with the book) that the book exposes the dangers of using these chemicals to kill bugs. (B) is the best answer.

(A) – A book would not likely be written to tout the benefits of using chemicals to kill bugs – that is what the chemicals would generally be used for. (C) – Using these types of chemicals may be convenient, but *massacre* is typically not used to describe the killing of bugs. (D) – *Trepidation* implies that people were timid or nervous about using these chemicals. A book would not be written about how people feel – it would discuss facts about the practice. (E) – *Vulnerability* implies that somehow the chemicals were weak or

helpless as they killed off the crop-eating bugs. Chemicals can't be vulnerable in this way. They don't have feelings.

6. The correct answer is (A). Many people know that Shirley Chisholm was the first African American and woman to seek a presidential nomination, but the sentence also implies this. Her attempt was *unprecedented* since no one in those groups had done it before she did. (B) – Her bid was not really an unusual or quirky *idiosyncratic* reaction at all. She knew what she was doing. (C) – Her *enthusiasm* was probably the same as other women and African Americans who may have also attempted this. There doesn't seem to be anything exceptional about it. (D) – She did not have an obvious fear or *trepidation* that was unique for either African Americans or women. (E) – Ms. Chisholm's bid was not a *struggle*. She went through the typical routes as she sought the nomination from her party.

7. The correct answer is (A). Most people would need extensive instruction to play a harp in an orchestra. There are numerous *intricacies* that must be mastered to play a harp. They could only be learned and mastered through concentrated effort and instruction. (B) – The *minutiae* are the small details associated with the instrument. A player would need to know both the small and large details to play the harp well. The instruction may or may not be *exhaustive* – that may depend on the person's perception of the lessons. (C) – The *workings*, or machinery, of the harp is not what needs to be mastered. Instead, the person has to learn how to actually play the instrument. Remedial instruction is extra instruction. (D) – *Information* is not an effective word here as it is used to describe playing the harp. The coaching may or may not be *demanding,* depending on the person learning the instrument. (E) – *Corrective* coaching implies that there was incorrect coaching earlier. The response can be eliminated by analyzing this word.

8. The correct answer is (D). To *skulk* means to move around in a sneaky way, and the word implies the person or thing doing the skulking is trying to hide. *Striding* seems to directly contradict that word. Someone who is walking, or striding, is not usually trying to hide. Look for a pair of words that are in contrast to each other. In (D), *whisper* is the opposite of *talk*.

(A) – *Bristle* is a type of animal hair. *Fur* has a similar meaning. (B) – *Cogitate* means to think seriously about something. *Mull* means almost the same thing. (C) – To *wheedle* someone is to try to talk that person into doing something. It is the same as trying to *coax* someone. (E) – A *precursor* is something that happens before something else. This is similar to an *antecedent*.

9. The correct answer is (C). To *proselytize* means to try to convert a person to a political party or a religion. *Induce* means to influence or persuade a person. The words mean approximately the same thing. Look for a pair of words that have similar meanings. (C) – *Displace* means to move to a different place. *Reposition* means to change the place of something. These words are similar.
(A) – To *imbibe* means to take in or to drink something. This is in contrast to the word *remove.* (B) – *Flummox* means to confuse. To *explain* is to try to make someone less confused. These words are in contrast to each other. (D) – To be *reposed* is to be resting. To be *agitated* is the opposite of being reposed. (E) – *Dubious* means that one is not sure about something. If someone is *decided*, they are certainly not dubious.

10. The correct answer is (B). To *reticulate* means to form into a network. A *highway* can be thought of as being part of a larger network. Look for a pair of words where the first word mentions a set that the second word may clearly be a part of. (B) – A *canton* is a region or a division of a country. A *region* is a part of a canton. This choice is correct.
(A) – Something that is *funereal* would also be *sad.* This response does not work as a set and subset. (C) – An *itinerary* and a *schedule* are essentially the same thing. (D) – A *ballot* is a part of an *election*. If the order of these words had been switched, this response may have been a good possibility. (E) – A *circuit* is often part of a *course*. This response is not a larger set/subset pair of responses.

11. The correct answer is (C). A *redoubtable* mother is one who is respected. It describes the way a person may feel about his or her mother. (C) – *Cherished* may describe how a person feels about his or her spouse.

(A) – *Capricious* tells how a puppy may change quickly. (B) – *Narcissistic* may describe how a teenager feels about his or herself. It describes a feeling of self-love. (D) – *Stately* may describe the appearance of a house. (E) – A *congenial* child is one who is agreeable.

12. The correct answer is (C). To be *jaded* by ideas means that the ideas are probably time-worn or old. (C) – A listener may be *bored* by a speech that is overdone or that has been heard already.

(A) – A person will feel refreshed, or invigorated, after a nap. (B) – A person may be *befuddled* or confused by a puzzle. (D) – Voters often feel optimistic or positive when a leader is inaugurated. (E) – Anticipating a gift means to look forward to it.

13. The correct answer is (A). *Iambic* is a foot in poetry and it consists of two syllables. (A) – Syllables are parts of a word.

(B) – Chapters are divisions of a book. (C) – Words are the components of a speech. (D) – A song is made up of a rhythm. (E) – dialect is a variety of a language.

14. The correct answer is (D). *Hackneyed* means out of date or archaic. (D) – A *tacky* guise is a frumpy outfit – one that is outdated or old-fashioned.

(A) – A *novel* idea is a unique one. A *conjecture* is a theory or hypothesis. (B) – A *ludicrous* joke is one that is very funny. (C) – A *bromidic* speech is one that is commonplace. (E) – A *perspective* that is *unique* is one that is different from other ways of looking at something.

15. The correct answer is (E). To *contrive* an *alibi* is to make up a story. (E) – To *create*, or fabricate, an *explanation* means about the same thing.

(A) – To *excuse* behavior is to forgive or pardon. (B) – *Dispel* means to drive away a *naysayer*, someone who opposes or denies something. (C) – To *initiate* means to begin. *Legislation* refers to laws. (D) – To *plagiarize* is to copy something.

16. The correct answer is (E). A *beatific bride* is one that is especially happy or blissful. (E) – A *delirious fan* is one who is excited.

(A) – A *plaintive infant* is one that is melancholy or sad. (B) – A petulant puppy is one that is irritable. (C) – A *dastardly lion* is one that is a coward. (D) – A *despondent clergy* is a priest or member of a religious order who is upset.

17. The correct answer is (B). The main idea of an article is usually presented in the first few sentences. (B) expresses the main idea, which is that statins are effective in controlling the amount of cholesterol in the blood.

18. The correct answer is (A). The only statement that is alluded to in the article is that statins can save lives since they are able to prevent fatal heart attacks in some people.

19. The correct answer is (C). The article says that the average weight of Americans has risen and so have their cholesterol levels. Higher levels are partially due to improper eating habits. The other responses can not be inferred from what is presented in the article.

20. The correct answer is (D). The article does not mention the price of the drug. I and II are mentioned in the piece.

21. The correct answer is (D). The article mentions I and II but says that even with a low cholesterol rate, a person can still suffer from a heart attack.

22. The correct answer is (A). The article's summary mentions that the purpose of statins is to slow the production of cholesterol in the body.

23. The correct answer is (A). The article details reasons statins can be effective in reducing the amount of cholesterol in the body.

24. The correct response is (D). The theme of the article is that news photographs must tell the story.

25. The correct response is (A). The passage implies that there are many components that go into taking a photo.

26. The correct answer is (C). An objective photograph is one that does not reflect personal feelings or biases.

27. The correct answer is (D). A good news photograph captures the action of the event or story. Verbs are action words.

28. The correct answer is (B). *Priory* is a name for a religious residence. (B) – A *depot* is a place where things are stored.

(A) – *Residence* is a similar word to *priory*. (C) – A *rectory* is a place where priests live. (D) – A *convent* is a place where nuns live. (D) – A *monastery* is a place where monks live.

29. The correct answer is (B). A *recreant* is a turncoat, a rat, a person who tells secrets. (B) – A *loyalist* is one who stays loyal to his organization, a religion, or a particular group.

(A) – A *turncoat* is a person who changes alliances. (C) – An *apostate* is one who abandons a previous loyalty – often someone who renounces a religion. (D) – *Craven* means to lack courage. (E) – A renegade is a person who deserts his faith or rejects lawful behavior.

30. The correct answer is (A). *Obliterate* means to remove something from existence. (A) – *Reinstate* means to restore to a previous state.
(B) – *Obscure* means to hide from view. (C) – *Efface* means to erase. (D) – *Extirpate* means to wipe away or destroy. (E) – *Excise* means to remove or take away.

31. The correct answer is (E). Dogma refers to a point of view. (E) – A *fact* is something that has been proven to be true.

(A) – An *ism* is a doctrine or theory. (B) – A *tenet* is a belief or principle generally thought to be true. (C) – A *doctrine* is a principle or position that is taught. (D) – A *philosophy* is a group's or a person's basic set of beliefs, attitudes, or concepts.

32. The correct answer is (B). *Supercilious* means that a person is sneering or expressing contempt. (B) – A *diffident* person is a shy person.

(A) – A *disdainful* person is someone who treats others as though he is better than they are. (C) – *Haughty* means almost the same as disdainful. (D) – A *prideful* person is one who is disdainful or haughty. (E) – A person who is *stuffy* is acting in a disdainful or prideful manner.

33. The correct answer is (A). *Effulgent* means beaming or bright. (A) – *Leaden* means dull or gray.

(B) – *Beaming* has the same meaning as effulgent. (C) – *Radiant* has the same meaning as effulgent. (D) – *Brilliant* has the same meaning as effulgent. (E) – *Refulgent* means to have a radiant quality.

34. The correct answer is (C). *Abscond* means to leave or escape. (C) – *Capitulate* means to surrender.

(A) – *Escape* means to get away. (B) – *Evade* means to get away from. (D) – *Bolt* means to run or flee. (E) – *Decamp* means to leave.

35. The correct answer is (A). Attentuate means to weaken. (A) – *Fortify* means to make something stronger.

(B) – *Dissipate* means to disintegrate. (C) – *Subvert* means to overthrow or significantly weaken. (D) – *Devitalize* means to make less vital. (E) – *Diminish* means to decrease.

36. The correct answer is (E). *Discordant* means not in agreement. (E) – *Symmetrical* means harmonious or proportionate.

(A) – *Uneven* means not consistent or unequal. (B) – *Dissonant* means that something is not in harmony or is unresolved. (C) – *Inharmonic* means that something is not in harmony. (D) – *Disparate* means inconsistent.

37. The correct answer is (E). *Exacerbate* means to make worse. (E) – *Mollify* means to make better.

(A) – *Deteriorate* means to become worse. (B) – *Acerbate* means to embitter. (C) – *Aggravate* means to bother. (D) – *Exasperate* means to make worse or irritate.

38. The correct answer is (B). *Garrulous* means chatty. (B) – *Diffident* means shy, lacking confidence.

(A) *Loquacious* means that a person is an excessive talker. (C) – *Prolix* means to use many words. (D) – *Blabby* means to talk too much. (E) – *Forthcoming* means open or candid.

39. The correct response is (E). *Fabricated* means made up.

(A) – *Supercilious* means proud or snippy. (B) – *Appropriated* means took over. (C) – *Arresting* means exciting. (D) – *Insipid* means dull or bland.

40. The correct response is (A). *Extrapolate* means to estimate.

(B) – *Embroider* means to overstate. (C) – *Equivocate* means to misstate. (D) – *Acerbate* means to exacerbate or make worse. (E) – *Hyperbolize* means to exaggerate.

41. The correct response is (A). The producer thinks the girl won't work for the role. This is because the girl is *reticent*, or reluctant to call attention to herself. However, the producer found out that the opposite was true. The girl was quite *gregarious*, meaning she enjoyed the company of others.

(B) – *Demonstrative* means affectionate and loving, and would not be a reason why the girl would be unfit for the lead role. (C) – *Aloof* and *restrained* mean roughly the same thing. This answer choice can be ruled out because the sentence is set up to express a contrast.

(D) – *Detached* means distant, which wouldn't be a positive or fitting quality for a

performer. (E) – *Taciturn* means reserved or aloof, which wouldn't be a positive quality for a performer.

42. The correct response is (B). The family gives the dog back because there was something about it that they didn't expect. (B) – *Truculent* means to be hostile or defiantly aggressive. (A) – *Jocund* means playful. (C) – *Blithe* means playful. (D) – *Convivial* means pleasant. (E) – Pretentious means pompous or conceited.

43. The correct response is (D). Jay is probably unsure of himself if he is seemingly hiding in the back of the lecture hall. (D) – *Diffident* means shy or lacking self-confidence.
(A) – *sanguine*, (B) – *impudent*, (C) – *brazen*, and (E) – *presumptuous* all imply that a person has confidence.

44. The correct response is (C). The sentence implies that there must be an organized system in place to learn the facts. (C) – *Imbibe* means to absorb, to take into the brain. *Mnemonic* is a system of memorization.
(A) – *Surmise* means to assume or guess and *arduous* means challenging. (B) – *Evade* means to get away from or avoid and *rudimentary* means simple or basic. (D) – *Conjecture* means to drawn an inference and *facile* means easy. (E) – Challenge means to have an issue with and *abstruse means complex.*

45. The correct response is (D). *Virulent* means infectious.
(A) – *Tedious* means difficult. (B) – *Benign* and (C) – *clement* mean non-threatening or gentle. (E) – *Repugnant* means offensive.

46. The correct answer is (C). *Elocution* means speaking clearly. This is a quality necessary for an *announcer*. (C) – A *boxer* must be *belligerent*, which describes somebody who is assertive or aggressive.
(A) – A *model* is not supposed to be *slatternly*, which means untidy or slovenly. (B) – A *surgeon* does not necessarily have to be persistent, or *diligent*. (D) – A *sloth* is slow, so it is

not *nimble* or quick. (E) – A *singer* must be musical. *Dissonance* implies that the singer is not musical.

47. The correct answer is (B). A *sentinel* is a guard. A sentinel may be asked to guard a *masterpiece*. (B) – A *chaperone* may be guarding or paying close attention to a minor who has been entrusted to him.

(A) – A *recidivist* is a repeat offender who will go back to prison, sometimes known as the penitentiary. (C) – A *sculptor* may use a *chisel* to create a work of art. (D) – An *apostate* is a traitor, the opposite of a *patriot*. (E) – *Perfunctory* means routine. A perfunctory *signal* is one that is given with regularity.

48. The correct answer is (C). *Pragmatism* is a practical way to *approach* problems. *Negotiation* is also a practical way to solve, or *settle*, problems.

(A) – Something that is *malleable* is easy to work with or change. (B) – *Insolence* is a lack of respect. (D) – Something that is *innocuous* is not dangerous. (E) – *Ignominy* means to be scornful or to have disdain towards something.

49. The correct answer is (D). *Temporal* means that something is of this world. Our *possessions* are of this world. *Immortal* implies that something is not of this world. Our *soul* is sometimes said to be other-worldly.

(A) – *Cadaver* is another word for a *corpse*. (B) – To *conceive* something is to create it or to *formulate* it. (C) – To *foresee* something is to be able to *anticipate* it. (E) – Something that is *astral* is *stellar*, of the stars.

50. The correct answer is (A). A *banal sermon* is a boring talk by a preacher. A *mundane lecture* is a trite, or insipid, talk.

(B) – An *insolent personality* is one that is brazen or brassy. (C) – *Amenity* means to be agreeable. A *minion*, an assistant or worker, may be agreeable. (D) – To *enthrall* means to fascinate. A *storyteller* may enthrall listeners. (E) – To *regale* means to captivate. A *movie* can captivate its audience.

51. The correct answer is (E). *Loquacious* means talkative. A *gossip* is an outgoing person. *Demonstrative* means outgoing. A *barker* is someone who hawks things by peddling them aloud.

(A) – *Prickish* means irritable. A *toddler* may be irritable. (B) – *Clandestine* means secretive. An *operative* is a type of detective. (C) – *Penitent* means remorseful. A *criminal* may be sorry for what he or she has done. (D) – *Taciturn* means succinct. An *orator* may be succinct in what he or she is talking about.

52. The correct answer is (B). A *lexicon* is a knowledge of words. An *editor* must have a knowledge of words to adequately revise and work with a manuscript.

(A) – *Vitality* refers to energy and strength. A *physician* does not necessarily need vitality to perform his job well. (C) – *Notes* are found within songs performed by a *singer*. (D) – A *pen* is one of an *architect*'s tools. (E) – An *aqueduct* is a channel that a *sailor* may sail through.

53. The correct answer is (C). A *pervious footpath* is one that is accessible. A *way* is an unobstructed passage, and a *thoroughfare* is a type of way.

(A) – A *sentry* is a guard who ensures no one leaves a *prison*. (B) – To *besiege* a *city* is to block it. (D) – *Insuperable difficulties* are those that are difficult to overcome. (E) – *Effulgent sunshine* is vivid sunshine.

54. The correct answer is (E). *Equitable* means equal. *Halves* are equal. Things that are *compatible* are able to work together well. They are similar or the same (*uniform*).

(A) – Something that is *unique* is a rarity. (B) – An *unwieldy package* is one that is big and difficult to carry. (C) – An *aberration* is a deviation. A *sculpture* that is an aberration is one that is different from the norm. (D) – An *anomaly* is something that is unusual or rare. It is the opposite of *routine*.

55. The correct answer is (C). According to the passage, the humanist looks for the meaning of his life and then works to fulfill that meaning.

56. The correct answer is (D). A *sanguine* personality is a confident one. A *haughty* personality is a distant one, *daunted* means to be unsure, *apprehensive* means to be nervous, and *introversive* means to be quiet and shy.

57. The correct answer is (C). The passage says that the humanist does not believe in an afterlife and that by the end of his life, he will feel that his journey is over.

58. The correct answer is (B). The passage mentions that chlorine is made up a legion of chemicals. These two chemicals are simply two of many.

59. The correct answer is (B). The passage notes that the chlorine must be replenished regularly to ensure a particular pH level in the water.

60. The correct answer is (D). The main idea of the article is to explain how chlorine works in pool water.

61. The correct answer is (B). The sentence implies that the smell of chlorine bothers some people. *Repugnant* implies that the scent is offensive to these people. *Bearable* means that the smell is tolerable. *Extrinsic* means alien or foreign. *Pleasant* and *congenial* both imply that the smell is one that people like.

62. The correct answer is (B). The passage mentions that a delicate pH balance is necessary for safe pool water. Any deviation from that balance can be harmful to those who may go into the water.

63. The correct answer is (A). The writer provides the information about tears so the reader will know what this routine pH level is and will then be able to compare this with the ratio in pool water.

64. The correct answer is (B). The passage implies that chlorine will kill all the bacteria in the pool water, not just keep it at a tolerable level. Pool water does not have to be constantly tested. Rather, it is checked at regular intervals and chlorine is added as needed.

65. The correct answer is (A). *Eradicate* means to get rid of completely – to *exterminate*. *Adulterate* means to make impure, *vitiate* means to make defective, *exacerbate* means to cause irritation or to make worse, and *enervate* means to lessen strength.

66. The correct answer is (A). *Burgeon* means to increase. The opposite of this is to decrease, or (A) – *abate. Blossom, compound, augment,* and *manifold* are all synonyms for burgeon.

67. The correct answer is (E). *Volatile* means changing quickly. The opposite of this is staying the same or remaining steady. (E) – *uniform* refers to something that is unchanged. *Elastic, variable, flighty,* and *flippant* are all synonyms for *volatile.*

68. The correct answer is (B). *Obloquy* means to criticize or abuse. The opposite of this is to praise, or (B) – *laud*. *Disgrace, mishandle, exploit,* and *decry* are all synonyms for abuse or criticize.

69. The correct answer is (C). *Cacophony* means a harsh blend, usually of sounds. The opposite of this is an agreeable and melodic choice of sounds. (C) – *consonant* means agreeable. *Raucous, dissonant, inharmonious,* and *rude* are all synonyms for *cacophony*, and imply a brash sound.

70. The correct answer is (D). *Insidious* means crafty, harmful, or wily. The opposite of this is straightforward. (D) – *candid* means straightforward. *Wily, toxic, treacherous,* and *perfidious* are all synonyms for *insidious*, and mean sly or astute.

71. The correct answer is (D). *Inexorable* means stubborn or inflexible. The opposite of this is flexible or easily changing. (D) – *compliant* means changing or flexible. *Steadfast, stubborn, resolute,* and *immobile* are all words that mean inflexible.

72. The correct answer is (E). *Impede* means to prevent or to somehow get in the way of something. The opposite of this is to assist. (E) – *cooperate* means to aid or assist. *Forestall, hinder, overslaugh,* and *bar* all mean prevent or prohibit.

73. The correct answer is (B). *Plaintive* means full of sorrow, or very sad. The opposite of this is happy. (B) – *exalting* means full of happiness. *Lamenting, melancholy, deploring,* and *piteous* all mean to be sad or sorrowful.

74. The correct answer is (A). *Reproof* means to nag someone. The opposite of this is to praise them. (A) – *eulogize* refers to a method of praising. *Reproach, chide, admonish,* and *rebuke* are all ways to say that someone is being nagged.

75. The correct answer is (E). *Anomalous* means that something is unusual or irregular. The opposite of this is when something is usual or regular. (A) – *customary* means typical or usual. *Exceptional, foreign, prodigious,* and *singular* all mean rare or unusual.

76. The correct answer is (D). *Verity* means truth. The opposite of this is an untruth or a lie. (D) – *misrepresentation* is a type of lie or falsehood. *Veracity, authenticity, accuracy,* and *frankness* are all words that imply truthfulness and honesty.

Section 2 - Quantitative

1. The correct answer is (A). To solve, substitute a value for x.

If $x = 12$, then Paul has $(12)3 - 1 = 35$ students.

$$x^2 = 144$$
$$2(35) = 70$$

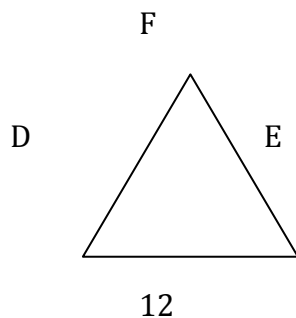2. The correct answer is (B). Use the formula to find the sides of a right triangle.

$$a^2 + b^2 = c^2$$
$$8^2 + b^2 = 17^2$$
$$64 + b^2 = 289$$
$$b^2 = 225$$

3. The correct answer is (D). An isosceles triangle has two sides of the same length. The two equal sides could be DE and EF or DE and EF. They could also be DF and EF. The correct answer can't be determined from the information provided.

F

D   E

12

4. The correct answer is (C). Remember that vertical angles are equal.

5.The correct answer is (C). Remember that adjacent angles add up to 180°.

6. The correct answer is (A). The median is 116. To find the median of a group of numbers, first put the numbers in order:

100, 103, 106, 109, 109, 115, 117, 120, 125, 125, 126, 130. Find the number that is in the middle of this group: 116.

The average is 115.41. Add the numbers together and divide them by 12. (1385/12)

7. The correct answer is (B). 6 – 4x > 3; -4x > 3 – 6; -4x > -3; x < 3/4

8.The correct answer is (B). The perimeter of the triangle described in Column A is 25cm. One half of 25cm is 12.5cm. The perimeter of the square described in Column B is 12.8cm.

9.The correct answer is (B). The digits can be formed into five new three-digit numbers: 431; 314; 341; 143; 134

10.The correct answer is (B). The probability of throwing an even number is $\frac{3}{6}$.

11.The correct answer is (B). The least common multiple of 267 and 1782 is 3. The least common multiple of 252 and 1330 is 7.

12.The correct answer is (C). The two quantities are equal. A?

$$4x - 3y = 8$$
$$\underline{-2x + 5y = 10}$$
$$2x + 2y = 18$$
$$x + y = 9$$

13. The correct answer is (D). There is not enough information to determine the length of the sides of the rectangle.

14.The correct answer is (B). To find BC, $a^2 + b^2 = c^2$.

    a = 8.5cm (half of 17cm)

 Since point A is the center of the circle, AB and AC are equal:

$$8.5^2 + 8.5^2 = c^2$$

$$72.25 + 72.25 = c^2$$

$$144.50 = c^2$$

$$12.02 = c$$

BC = 12.02 cm

AD = 8.5 cm

15. The correct answer is (A). To solve, first multiply $\frac{1}{2} \times \frac{2}{5} = \frac{2}{10} = \frac{1}{5}$; then divide the

result by 3: $\frac{1}{5} \times \frac{3}{1} = \frac{3}{5}$.

Then multiply $\frac{1}{6} \times \frac{3}{4} = \frac{3}{24} = \frac{1}{8}$; then divide the result by 2 : $\frac{1}{8} \times \frac{2}{1} = \frac{2}{8} = \frac{1}{4}$.

16. The correct answer is (C). To solve, first find the average of the numbers 13 and 75:

   $(13 + 75) \div 2 = 44$

   Next, figure out the number of terms: $75 - 13 + 1 = 53$

   Then, multiply the two figures: $44 \ x \ 53 = 2332$

17. The correct answer is (D). To find the missing part of this ratio, create a fraction with

the full spaces over the empty ones: $\frac{full}{empty} = \frac{3}{5} = \frac{x}{940}$ $940 \times 3 = 2820$

5x = 2820; x = 564

18. The correct answer is (A). First, convert 2 ½ hours to minutes: 150 minutes. Then divide 216 by 150: 1.44 ears of corn/minute.

19. The correct answer is (E). To find the length of CD, first find the lengths of the sides of triangle ABC. Since it is a right triangle, first see whether it is a 3-4-5 triangle by trying the numbers 28 and 35 for the two missing sides. Since BCD is an isosceles triangle, we know that two sides are equal. These two sides may be both equal to 35cm or 40cm. The correct answer can't be determined.

20. The correct answer is (D). To solve, move the decimal point on the numerator of each fraction to the right. For each fraction, move the decimal point in the denominator the same number of places. This creates the following fractions: I: $\frac{4}{10.8}$; II: $\frac{4}{1.8}$; III: $\frac{4}{.18}$; IV: $\frac{4}{1.8}$

21. The correct answer is (D). Consulting the chart, you can see that the number of students rose from 450 to 500 during this period. This increase is larger than the one observed in the other three categories.

22. The correct answer is (B). According to the chart, in 2000, the number of liberal arts students was approximately 1500. In 2004, the number of liberal arts students was about 1200. Subtract these two figures, and you can conclude that the number of students enrolled in this major decreased by about 300.

23. The correct answer is (C). From the table, you can see that the total number of students in 2004 was 1200. The table shows that 300 of those students were unsure of their plans. Divide to find that 300 is 25% of 1200.

24. The correct answer is (C). By adding all of the figures on the chart, you can see that there are 1780 students enrolled in all STEM majors. 15% of these students (267) are in a math major. Subtract that number from the total to find that 1513 students are not enrolled in a math major.

25. The correct answer is (A). Because there are 25 new engineering students, the total number of students is now 1805. Originally, there were 356 engineering students (20% of 1780). With the additional 25 students, this has increased to 381. Divide to find that 381 is 21% of 1805 students.

26. The correct answer is (C). To find the original student body, use the formula:

$0.94 \ x \ (Original \ student \ body) = 22{,}278$

$Original \ student \ body = 22{,}278 \div 0.94 = 23{,}700$

27. The correct answer is (B). To find the slope of a line use the formula:

$Slope = \dfrac{rise}{run} = \dfrac{change \ in \ y}{change \ in \ x}$

$Slope = \dfrac{-2 - 7}{8 - 3} = \dfrac{-9}{5}$

28. The correct answer is (C). To find interest, use the formula:

$Interest = Principal \ x \ Interest \ rate \ x \ time$

For calculation purposes, the *interest rate* should be expressed as a decimal and *time* should be expressed in years.

$Interest = 18{,}000 \times .04 \times \dfrac{4}{12}$

$18000 \times .04 = 720$

$720 \times \dfrac{4}{12} = 240$

29. The correct answer is (B). To solve, first find the original sum of the test scores from the first five tests:

$5 \times 65 = 325$

Now add the new test score to that total:

$325 + 83 = 408$

Divide the total score on the tests taken by six, the total number of tests:

$408 \div 6 = 68$

30.The correct answer is (A). To solve, you need to find the overall average of the groups. To find the overall average, first multiply each group's average by the size of the group:

$(1 \times 162) + (2 \times 156) = 162 + 312 = 474$

Divide the sum by 3, the number of parts = $474 \div 3 = 158$

31. The correct answer is (D). There is no way to know the size of the pebbles. Larger pebbles can be in one bag, so less may fit into it. Unless the pebbles were said to be a uniform size, the answer can't be determined from the information given.

32. The correct answer is (B). To find the range of the test scores, subtract the lowest score from the highest score:

$100 - 58 = 42$

To find the average, add the scores and divide by the number of tests: $479 \div 6 = 79.8$

33. The correct answer is (C). The two quantities are equal. To find the original population, first convert 17% (the decline) to the percentage of deer that remain. If 17% have disappeared, 83% remain. Since 498 deer represent 83% of the original population, we can simply divide to calculate the original deer population: 498/83% = 600.

34. The correct answer is (A). To solve this problem, think of a number that fits this criteria – when you divide it by 9, there is a remainder of 4. We will use 40 for this example, since when 40 is divided by 9, there is a remainder of 4.

Substitute 40 for *x* in the Column B equation: $3x = 120; 120 \div 9 = 13, remainder\ 3.$

The quantity in Column A (4) is greater than the remainder from the second quantity (3).

35. The correct answer is (B). To solve this problem, first find the total number of times John Doe is mentioned in the entire book:

$(200 \times 4) + (125 \times 6) = 800 + 750 = 1550$

Divide this total by the number of pages in the book: $\frac{1550}{325}$ = 4.769

The quantity in Column B (5) is greater than this average.

36. The correct answer is (B). To solve this problem, first assign a variable to each of the known animals:

a = dogs

b = horses

c= cats

Then figure out what ratios are known: $a : b = 5 : 2 \quad b : c = 3 : 7$

To get the b variable (2 in the first ratio, 3 in the second ratio) to be equal in both ratios, multiply the first ratio by 3 and the second ratio by 2. In this way, the b variable will become equal in each ratio – it will become 6: $a : b = 15 : 6; \quad b : c = 6 : 14$.

Therefore, $a : c = 15 : 14$.

If there are 30 dogs at the shelter, there will be 28 cats.

37. The correct answer is (B). To find the cost per pound of the mixture, first find the total cost of the mixture.

Grapes + strawberries: $6(1.69) + 4\,(2.19) =$

$10.14 + $8.76 = $18.90

To find the price per pound, divide the cost by the total number of pounds in the mixture:

$18.90/10 pounds = $1.89/pound

38. The correct answer is (A). To find the number of people who have visited both places, add the known quantities and subtract x. This number will be equal to the total number of people at the resort.

$105 + 34 + 40 - x = 150$

$179 - x = 150$

$x = 29\ people\ have\ visited\ both\ Mexico\ and\ Jamaica$

39. The correct answer is (A). The GRE test will not ask you to calculate the actual standard deviation of two amounts, but to show that you understand what this figure represents. Here, you can see that City x has a greater spread in their snowfall amount, and therefore has a greater standard deviation. City x has a spread of 16 to 2. City y has a spread of 17 to 6.

40. The correct answer is (C). Both values are equal. When multiplying exponents that have the same base, add the exponents together.

41. The correct answer is (C). Any number raised to the power of 0 equals 1.

42. The correct answer is (B). To solve: $x^2 + 8 = 6x$ Set the equation equal to 0:

$$x^2 - 6x + 8 = 0$$
$$(x - 4)(x - 2) = 0$$
$$x = 4, x = 2$$

5 is great than either of the two possible answers.

43. The correct answer is (A). To solve, find the fifth and sixth terms in the sequence: $n6 = 6^2(6) = 216$

$n5 = 5^2(5) = 125$

The difference between the sixth and the fifth terms is $216 - 125 = 91$

44. The correct answer is (C). The two quantities are equal. To find the volume of a sphere, use the formula $\frac{4}{3} \pi r^3$

volume $= \frac{4}{3} \pi r^3$

$\frac{4}{3} \pi 27$

$\frac{4}{3}$ 84.78 = 113.04 cubic centimeters

45. The correct answer is (B). To find the volume of a cylinder, use the formula $\pi r^2 h$ and insert the information given in the problem.

volume $= 3.14(36)3 = 339.12 \; cubic \; feet$

46. The correct answer is (E). There is no way to know how many students scored between 60 and 65 on the test, so the total cannot be determined.

47. The correct answer is (C). The average of the list of numbers is the same as the average of 16 and 68.

$$\frac{16 + 68}{2} = \frac{84}{2} = 42$$

48. The correct answer is (D). To solve, use this ratio:

$$\frac{36}{4} = \frac{8100}{x}$$

$8100 \; x \; 4 = 32400$

$32400 \div 36 = 900$

49. The correct answer is (A). First, convert hours to minutes: 33 hours x 60 = 1980 minutes. Then divide the minutes by the number of steps:

23760 steps/1980 minutes = 12 steps/minute

50. The correct answer is (C). First, subtract 8 from both sides of the equation.

$-4y > -2$

Divide both sides by -4:

$$y > \frac{-2}{-4} = \frac{1}{2}$$

Change inequality sign: $y < \frac{1}{2}$

51. The correct answer is (A). $\left| y - 6 \right| < 10$ so $(y - 6) < 10 \; and - (y - 6) < 10$ so

$y - 6 < 10 \qquad\qquad y - 6 > -10$

so $y < 16 \qquad\qquad y > -4$

$-4 < y < 16$

52. The correct answer is (E). The circumference of a circle can be calculated using the following formula: $C = 2\pi r$

10π = 2πr

5 = r

Then, take the radius and calculate the area of the circle using the following formula:

πr^2

25π

53. The correct answer is (A). Slope is found by calculating the change in y over the change in x: $\frac{-3-3}{4-1}$ = -6/3 = -2

54. The correct answer is (E). Imagine that the price of corn was originally $100. In year one, the price rose 20%: $100 + 20 = \$120$. In year two, the price rose 15%:

$120 + (15\% \ of \ 120) = 120 + 18 = 138$. Since the original price was $100 and the final price was $138, we can see that the price rose by 38% during the past two years.

55. The correct answer is (A). To solve, recall that a number raised to the one-half power is the same as the square root of the number (and a number raised to the one-third power is the same as the cube root of that number). The square root of 16 is 4. The cube root of x is $\sqrt[3]{x}$. Add these together to get the correct response.

56. The correct answer is (C). To solve, ensure that like variables are in the same place and then compare the two equations:

$$-3x - 2y = 14$$
$$\underline{4y + 5x = 10}$$
$$2x + 2y = 24$$

Divide both sides of the equation by 2: $x + y = 12$

57. The correct answer is (C). To solve, substitute 0 for x and solve:

$f(0) = 0^2 + 2$

$f(0) = 2$

58. The correct answer is (E). The diagram shows that exterior angle EF = 150°. Since this angle lies on a straight line, angle DFE must equal 30°. We can see that this is a right triangle, and now we know that it is a 30-60-90 right triangle. With this information and our knowledge of right triangles, we know that the ratio of sides is $1:\sqrt{3}: 2$. Side DE is half of the hypotenuse, DF. Since we know that DE is 9, the hypotenuse, DF must be 18.

59. The correct answer is (D). To solve, first find the length of side BD. We know that the perimeter is 14, so by subtracting the total of the sides we know, we find that this side is 3. This tells us that it is an isosceles triangle, with two equal sides and two equal angles. To find the area, we use the formula $\frac{1}{2} bh$.

We know that the base is 8. To find the height, draw a line from point D straight down to cut line BC in half. Name the point where the line hits BC as E. This new line forms two right triangles, CED and BED, each with a side of 3 and a hypotenuse of 5. We can tell these are 3-4-5 right triangles. The height of the original triangle is 5. We can then solve the equation to find the area:

$\frac{1}{2} 8(5) = \frac{1}{2} (40) = 20$

60. The correct answer is (B). Find the rate per second: Rate = $\frac{18}{30}$

Multiply this by 215: $\frac{(18)(215)}{30} = 129$

Section Three – Analytical Writing
Sample Essay Responses

Essay #1 – Issue

Initially, Hoffer's argument seems to be a logical one. Those who spend too much time thinking about what may happen are probably going to alter what is actually happening now. So someone who is preoccupied and worrying about an earthquake hitting their city may not realize that life is grand and their city is especially beautiful. Instead, that someone may be spending time reinforcing his home, ensuring his personal effects are in a safe place, and planning for a time when there may be no power. All his waking hours may be spent trying to plan for this future natural disaster or catastrophe.

This seems to be what Hoffer implies by his reference to rearranging the past. If that worried and preoccupied person had been enjoying life unfettered, he might be hiking with his friends on the weekends instead of reviewing his list of what needs to be done to prepare for the anticipated earthquake. He may be spending time with his family members instead of taking crystal heirlooms out of a display case in the living room and storing them somewhere safe. He may be composing a piece of music rather than moving the piano out of his front room and to a safer place.

The anticipated future may never happen, but his rearranged past certainly has. Due to his preoccupation with something that may or may not ever happen, he has altered his life and taken time that he will never get back. What the person is doing is not wrong, per se, since he is admittedly preoccupied. He probably can't help himself and simply can't see the present as it is. He is rearranging his life and his past, but it probably doesn't matter. He is able to sleep at night knowing that he has done all he can to protect himself from the anticipated disaster.

Essay #2 – Argument

Many people working today will never see a penny of what they are paying into social security. That may seem wrong, but social security payments were never intended for everyone. The original plan for social security was for the fund to provide a minimum source of income for retired people, minors who have lost a head-of-household parent, and disabled people.

The amount of money the average person receives in a monthly social security check is usually not enough to live on. The fund is designed to provide a very minimum standard of living guarantee to those who are no longer working. Many people supplement their social security payments with a company pension or individual retirement accounts set up by the individual.

Because the fund is intended mainly for retirees, it is likely that not everyone who has paid into the social security fund will ever get their money. A percentage of people die before they retire. Some die a couple of years after they retire. To suggest that all of the money an individual has contributed to the system be available to his next-of-kin is preposterous, and probably even impossible. As money comes into the social security account, money goes out. It is not segregated into separate accounts for each person who has ever paid into it, and it is not interest-bearing. Even though the population has grown in the past few decades, it is probable that the money going in to the social security administration each month is less than the amount going out. There are many minors who are receiving payments today – probably more so than originally anticipated when the fund was created. The definition of "disability" has become broader than it was thirty or forty years ago, for example, and these children receive monthly checks to help their parents and caregivers take care of them.

Most people pay into social security without any thought that the money would ever be available to heirs. If a person would like that type of account, he or she would do better to

set up an Individual Retirement Account (IRA) and list next of kin to receive the payout in the event of the originator's untimely death.