

# Upper Level Practice Test I

---

## SECTION 1 25 Questions

Following each problem in this section, there are five suggested answers. Work each problem in your head or in the blank space provided at the right of the page. Then look at the five suggested answers and decide which one is best.

Note: Figures that accompany problems in this section are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale.

Sample Problem:

$\begin{array}{r} 5,413 \\ - 4,827 \\ \hline \end{array}$	(A) 586
	(B) 596
	(C) 696
	(D) 1,586
	(E) 1,686

(A)    (B)    (C)    (D)    (E)

- 
1. If all the sides in the polygon in Figure 1 are of equal length and its perimeter is 28, what is the length of one side?
- (A) 2  
(B) 3  
(C) 4  
(D) 6  
(E) 7

USE THIS SPACE FOR FIGURING.

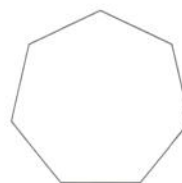


Figure 1

- 
2. Each person contributed the same amount toward a gift. If \$60 was collected, which CANNOT be the amount each gave?
- (A) \$0.50  
(B) \$5.00  
(C) \$9.00  
(D) \$15.00  
(E) \$30.00

GO ON TO THE NEXT PAGE.

3.  $N$  is a whole number between 1 and 5.  $N$  is also between 3 and 6. Which is  $N$ ?

USE THIS SPACE FOR FIGURING.

**1**

- (A) 2  
 (B) 3  
 (C) 3.5  
 (D) 4  
 (E) 5

4. Of the following,  $0.49 \times 81$  is closest to

- (A)  $\frac{1}{2}$  of 80  
 (B)  $\frac{1}{2}$  of 90  
 (C)  $\frac{1}{4}$  of 80  
 (D)  $\frac{1}{4}$  of 90  
 (E) 4 times 80

Questions 5-6 refer to the graph in Figure 2.

5. How many more history books than science books are there?

- (A) 2  
 (B) 602  
 (C) 1,200  
 (D) 1,800  
 (E) 6,000

6. The number of fiction books is how many times the number of biographies?

- (A) 2  
 (B) 3  
 (C) 6  
 (D) 200  
 (E) 1,800

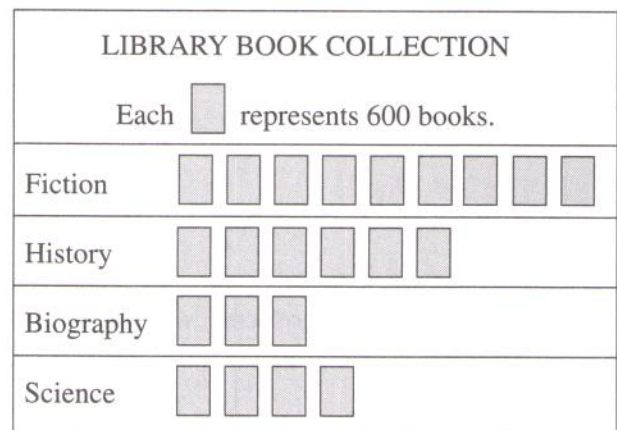


Figure 2

**GO ON TO THE NEXT PAGE.**

7. All of the following are greater than  $\frac{1}{2}$  EXCEPT USE THIS SPACE FOR FIGURING.

**1**

(A)  $\frac{101}{200}$

(B)  $\frac{17}{33}$

(C)  $\frac{7}{12}$

(D)  $\frac{600}{1000}$

(E)  $\frac{24}{50}$

8. For what price is 20 percent off the same as \$20 off?

- (A) \$1  
(B) \$10  
(C) \$100  
(D) \$1,000  
(E) It is never the same.

9. In Figure 3, the sides of squares  $PQTV$  and  $QRST$  are equal. Starting at  $P$ , travelling along the sides of the squares, which path is longest?

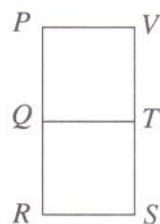


Figure 3

10. If  $\frac{1}{4}$  of a number is greater than 8, the number must be

- (A) less than 2  
(B) equal to 2  
(C) less than 32  
(D) equal to 32  
(E) greater than 32

11. To which of the following is 6.06 closest?

- (A) 61
- (B) 7
- (C) 6.7
- (D) 6.6
- (E) 6

USE THIS SPACE FOR FIGURING.

1

12. With 3 weeks remaining before the recycling van comes, Al has collected 23 more cans than Bob. If Bob is to collect more cans than Al, he must average at least how many more cans per week than Al?

- (A)  $7\frac{2}{3}$
- (B) 8
- (C) 24
- (D) 69
- (E) 70

13. In the triangle in Figure 4, what is the value of  $x$ ?

- (A) 30
- (B) 40
- (C) 45
- (D) 60
- (E) It cannot be determined from the information given.

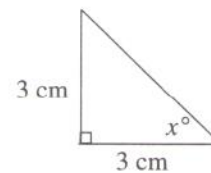


Figure 4

14. If  $5 \times (P + Q) = 30$  and  $P$  is greater than zero, then  $Q$  could NOT be

- (A) 7
- (B) 4
- (C)  $3\frac{1}{2}$
- (D) 0
- (E) -2

GO ON TO THE NEXT PAGE.

15. The sale of a certain product increased from 25 thousand units sold in 1992 to 5 million units sold in 1996. The number of units sold in 1996 was how many times the number sold in 1992?

(A) 5  
(B) 20  
(C) 200  
(D) 500  
(E) 2,000

USE THIS SPACE FOR FIGURING.

**1**

16. In Figure 5, the distance from  $P$  to  $S$  is 60, and the distances from  $P$  to  $Q$  and from  $R$  to  $S$  are equal. If the distance from  $Q$  to  $R$  is half the distance from  $P$  to  $Q$ , how far apart are  $P$  and  $Q$ ?

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

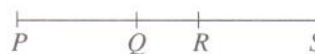







Figure 5

17. The bottom of the box of salt shown in Figure 6 is flat. Which of the following best represents all of the points where the box touches the paper?

(A)   
(B)   
(C)   
(D)   
(E) 

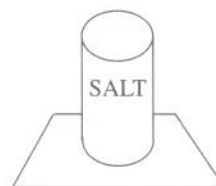


Figure 6

- 
18. Which of the following numbers can be written in the form  $(4 \times N) + 1$  where  $N$  is a whole number?

(A) 55  
(B) 62  
(C) 71  
(D) 84  
(E) 93

USE THIS SPACE FOR FIGURING.

**1**

- 
19. According to a market study, City X has 1.75 millionaires for every 1,000 people. If there are 8 million people in City X, how many millionaires are there?

(A) 14  
(B) 140  
(C) 1,400  
(D) 14,000  
(E) 140,000

- 
20. If  $y = 2x - 4$ , then what does  $y + 2$  equal?

(A)  $2x - 6$   
(B)  $2x - 2$   
(C)  $4x - 6$   
(D)  $4x - 2$   
(E) It cannot be determined from the information given.

- 
21. A string is used to show where the floor of a rectangular patio is to be laid. The width of the patio is to be half the length. If 12 meters of string just fit around the edges of the floor, what is the length of the patio?

(A) 6 m  
(B) 4 m  
(C) 3 m  
(D) 2 m  
(E) 1 m

**GO ON TO THE NEXT PAGE.**

- 
22. If  $S$  is the sum of two consecutive integers, which of the following is always true? USE THIS SPACE FOR FIGURING.

1
---

- (A)  $S$  is positive.  
(B)  $S$  is negative.  
(C)  $S$  is even.  
(D)  $S$  is odd.  
(E)  $S$  is greater than either number.
- 

23. A basketball player made exactly 80 percent of the shots she was allowed in a foul-shooting contest. She missed the first shot and then made 14 in a row. If she made 2 of her remaining shots and missed the rest, which of the following must be true?

- I. She had 20 shots in all.  
II. She missed 3 of her remaining shots.  
III. She made 40 percent of her remaining shots.
- (A) None  
(B) III only  
(C) I and II only  
(D) II and III only  
(E) I, II, and III
- 

24. Each of the members in the AZ club may bring up to 4 guests to a party. What is the maximum number of members and guests who might attend the party?

- (A)  $x + 4$   
(B)  $4x$   
(C)  $4x + 4$   
(D)  $5x$   
(E)  $5x + 4$



25. Ann's stock was worth  $28\frac{1}{4}$  a share when the stock market opened for the day and its value went down  $\frac{3}{8}$  during the day. If the amounts are in dollars, how many dollars were her 40 shares of stock worth at the end of the day?

- (A)  $1,080\frac{7}{8}$   
(B) 1,085  
(C) 1,115  
(D) 1,125  
(E) 1,155

USE THIS SPACE FOR FIGURING.

**1**

**STOP**

IF YOU FINISH BEFORE TIME IS CALLED,  
YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.



**SECTION 2**  
**40 Questions**

Read each passage carefully and then answer the questions about it. For each question, decide on the basis of the passage which one of the choices best answers the question.

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."

- The "end" mentioned in line 10 most likely refers to
  - Chopin's retirement from public life
  - the decline of Chopin's genius
  - the invalidism caused by his illness
  - Chopin's death in 1849
  - the end of the concert tour
- Performing while seriously ill with tuberculosis, Chopin surprised the audience with his
  - frail appearance
  - polish
  - loss of control
  - violence
  - energetic playing
- The author would most likely agree that
  - Chopin was made seriously ill by widespread misinterpretation of his music
  - Chopin's behavior alternated between extreme self-control and violent outbursts
  - Chopin's character was a commendable blend of sensitivity and restraint
  - the delicacy of Chopin's playing was due in large part to his health problems
  - Chopin prolonged his life in spite of his illness by keeping active
- Which of the following questions is answered by the passage?
  - When did Chopin's genius reach its peak?
  - Did Chopin compose much of the music he played?
  - How does Chopin's music mirror the times in which he lived?
  - How long was Chopin ill with tuberculosis?
  - How did Chopin compare with other pianists of his day?
- When discussing Chopin, the author's tone in this passage could best be described as
  - admiring
  - brusque
  - ironic
  - hesitant
  - anguished
- This passage deals primarily with Chopin's
  - musical compositions
  - musical performance
  - debilitating illness
  - aristocratic personality
  - romantic fervor

**GO ON TO THE NEXT PAGE.**

The Mahto band kept to a certain order when they traveled on the plain. And so Wanagi, the young seer, walked in back of the leader. They assigned this place in the procession of seventy persons to the one who carries the smoldering wood, the source of a cooking fire for these twelve Mahto families upon their arrival at the summer campground.

The grandfathers had said that only good hands—hands that never kill—shall hold these smoldering remains of the winter campfire, a symbol of the continuity of the people. And that the Mahto women, when they start their new campfires from these embers, shall offer thanks to Pte—the one and the herd—for Pte, the true meat, shall sustain each generation of Dakota.

7. This passage is primarily about
- (A) a Native American seer named Wanagi
  - (B) the significance of fire to the Dakota
  - (C) status symbols among Native Americans
  - (D) the military history of the Dakota
  - (E) the westward migration of the Dakota
8. According to the passage, all of the following are part of the rituals of the Mahto EXCEPT the
- (A) order in which they walk
  - (B) role of the person who carries the embers
  - (C) source of fire for the new campfires
  - (D) size of their families
  - (E) prayers that are offered when the campfire is started
9. According to the passage, the smoldering wood must be
- (A) kept safe from other tribes
  - (B) carried only by a male
  - (C) prayed over by the tribe as a group
  - (D) used only in ceremonies
  - (E) carried by someone who has never killed
10. The embers Wanagi carries symbolize which of the following to the Dakota?
- I. The beginning of hunting season
  - II. The thankfulness of Pte
  - III. The wisdom of their leader
  - IV. The continuity of their people
- (A) I only
  - (B) II only
  - (C) IV only
  - (D) III and IV only
  - (E) I, II, and IV only
11. The attitude of the writer toward the subject is
- (A) calculating
  - (B) respectful
  - (C) casual
  - (D) accusing
  - (E) cautious

**GO ON TO THE NEXT PAGE.**



*The following speech was delivered by Susan B. Anthony at her trial in 1873.*

Friends and fellow-citizens: I stand before you tonight under indictment for the alleged crime of having voted at the last Presidential election [1872], without having a lawful right to vote. It shall be my work this evening to prove to you that in thus voting, I not only committed no crime, but, instead, simply exercised my citizen's rights, guaranteed to me and all United States citizens by the National Constitution.

It was we, the people; not we, the White male citizens; nor yet we, the male citizens; but we, the whole people, who formed the Union. And we formed it, not to give the blessings of liberty, but to secure them; not to the half of ourselves but to the whole people—women as well as men. And it is a downright mockery to talk to women of their enjoyment of the blessings of liberty, while they are denied the use of the only means of securing them ...—the ballot...

The only question left to be settled now is: Are women persons? And I hardly believe any of our opponents will have the hardihood to say they are not. Being persons, then, women are citizens; and no State has a right to make any law, or to enforce any old law, that shall abridge their privileges or immunities.

12. In line 1, Anthony's use of "fellow-citizens" is ironic for which of the following reasons?
- (A) She was not fully a citizen because she had no right to vote.  
 (B) The audience included people not of her sex, race, or religion.  
 (C) Most of the citizens in the audience were females.  
 (D) Those in the audience who were her friends were not necessarily citizens.  
 (E) At that time women were not allowed to make speeches on public issues.
13. What does Anthony mean by "I stand before you tonight under indictment" (line 1)?
- (A) She had been framed by her opponents.  
 (B) She was already in jail.  
 (C) She had been falsely accused of voting in the last election.  
 (D) She was on trial and might be sent to prison.  
 (E) She had been allowed to speak by special permission.
14. How does Anthony's speech reflect the idea in a speech by Abraham Lincoln in which he defended "government of the people, by the people, for the people"?
- (A) It points out that all citizens should be able to elect their government.  
 (B) It shows that educated women can solve the problems of government.  
 (C) It shows that women can have only a theoretical interest in affairs of state.  
 (D) It shows that by voting Anthony was overreaching her rights as a citizen.  
 (E) It demonstrates that laws in violation of the Constitution are null and void.
15. Why does Anthony say that women's right to vote is guaranteed by the Constitution?
- (A) The Constitution explicitly gave women the right to vote.  
 (B) One of the blessings of liberty is being allowed to vote.  
 (C) The Constitution gave states the power to authorize women to vote.  
 (D) Only children and criminals were denied the right to vote.  
 (E) The Constitution begins, "We, the people," which includes women.
16. The purpose of Anthony's speech was to
- (A) influence the women on the jury in her favor  
 (B) prove that the right to vote would produce racial equality  
 (C) demonstrate that she and other women had the right to vote  
 (D) convince people of the need for economic justice: equal pay for equal work  
 (E) convince the jury that voting was only a tool to be used by women to gain other rights

**GO ON TO THE NEXT PAGE.**

In New England, Canada, and the western part of Europe, the summer of 1816 was extraordinarily cold. A meteorological record for New Haven, kept since 1779, records June 1816 as the coldest June in that city, with a mean temperature that would ordinarily be expected 200 miles north of the city of Quebec. In New England the loss of the staple crop of corn caused much hardship. The calamity of 1816 is an interesting case history of the far-reaching effects a catastrophe can have on human affairs.

The chain of events began in 1815 with an immense volcanic eruption in the Dutch East Indies (now Indonesia), when Mount Tambora threw an immense amount of fine dust into the atmosphere. This eruption, which was considerably larger than the better-known one of Krakatoa in 1883, reduced the height of Mount Tambora by 4,200 feet and ejected 25 cubic miles of debris. Ships at sea encountered large islands of floating pumice from Mount Tambora as much as four years after the event. The dust circled the earth in the high stratosphere for several years, reflecting sunlight back into space. Because the amount of sunlight reaching the ground was reduced, temperatures on earth were lowered.

17. The main purpose of this passage is to
- (A) report the meteorological record of frigid temperatures in New Haven in June, 1816
  - (B) discuss the transformation of much of Mount Tambora into 25 cubic miles of debris
  - (C) point out the delayed effect of a large volcanic eruption on air temperatures in distant places
  - (D) determine the effect of adverse weather conditions on staple crops
  - (E) discuss the pollution of oceans caused by large volcanic eruptions
18. Mount Tambora's eruption apparently caused hardship in New England primarily by
- (A) reducing the available sunlight
  - (B) dropping pumice in the water
  - (C) coating the crops with ash
  - (D) covering the land with debris
  - (E) burning the crops for several years
19. The author cites temperatures in New Haven in June of 1816 as an illustration of the
- (A) need to find ways of preventing natural disasters
  - (B) bad effects human intervention can have on natural phenomena
  - (C) importance of scientific weather forecasting
  - (D) usefulness of early meteorological records
  - (E) extensive effects of such catastrophes as volcanic eruptions
20. The tone of the passage indicates that the author considers the migration of volcanic dust in the stratosphere to be
- (A) exaggerated
  - (B) necessary
  - (C) disappointing
  - (D) fascinating
  - (E) insignificant
21. Which of the following is the author most likely to discuss next?
- (A) Causes of the eruption of Mount Tambora
  - (B) More details from the case history of the calamity of 1816
  - (C) A comparison of Mount Tambora and Krakatoa
  - (D) New methods of reducing volcanic water pollution
  - (E) The formation of islands out of volcanic pumice
22. The passage names all of the following places as being affected by the 1815 eruption of Mount Tambora EXCEPT
- (A) Canada
  - (B) Dutch East Indies (Indonesia)
  - (C) the western part of Europe
  - (D) Krakatoa
  - (E) New England

**GO ON TO THE NEXT PAGE.**



A wind sways the pines,  
And below,  
Not a breath of wild air  
*Line* Still as the mosses that glow

(5) On the flooring and over the lines  
Of the roots here and there.  
The pine-tree drops its dead;  
They are quiet as under the sea.  
Overhead, overhead

(10) Rushes life in a race,  
As the clouds the clouds chase;  
And we go,  
And we drop like the fruits of the tree,  
Even we,  
Even so.

—George Meridith  
*The Victorian Age*, by Bowyer and Brooks.

23. In this poem, our busy lives are compared to which of the following?
- I. The mosses that glow
  - II. The clouds blowing past
  - III. Activity under the sea
- (A) I only  
(B) II only  
(C) III only  
(D) I and II only  
(E) I, II, and III
24. "The pine-tree drops its dead" (line 7) suggests that
- (A) wind has damaged the tree beyond repair
  - (B) the tree will no longer produce cones
  - (C) the tree is dying and falling over
  - (D) pine trees do not change color
  - (E) pine needles and cones fall from the tree
25. In this poem, the wind above and the stillness below most probably represent
- (A) the sky and the sea
  - (B) restlessness and contentment
  - (C) happiness and sadness
  - (D) human life and death
  - (E) youth and old age
26. With which of the following statements about death would the speaker be most likely to agree?
- (A) People should try not to think about death.
  - (B) Having no appreciation of nature is like being dead.
  - (C) Death is an inevitable part of life.
  - (D) Death often comes suddenly and unannounced.
  - (E) Death usually comes when life is quiet and still.

I am not sure that I can draw an exact line between wit and humor, but I am positive that humor is the more comfortable and livable quality. Humorous persons, if their gift is genuine, are always agreeable companions and they sit through the evening best. They have pleasant mouths turned up at the corners. To those corners the great Master of marionettes has fixed the strings and holds them with nimble fingers that twitch them at the slightest jest. But the mouth of a merely witty person is hard and sour until the moment of its discharge. Nor is the flash from a witty person always comforting, whereas a humorous person radiates a general pleasure and is like another candle in the room.

27. According to the author, a humorous person is like
- (A) an expensive gift
  - (B) a loaded gun
  - (C) an unusual puppet
  - (D) a comforting light
  - (E) a mechanical toy
28. The author uses the analogy of marionettes to illustrate that humorous people
- (A) are never forgotten
  - (B) smile frequently
  - (C) control their companions
  - (D) surprise their friends
  - (E) attract many friends
29. The author implies that witty people are likely to make remarks that are
- (A) sentimental
  - (B) emotional
  - (C) displeasing
  - (D) irrelevant
  - (E) explanatory
30. Which of the following best expresses the author's main point?
- (A) It is more pleasant to be with humorous people than with witty people.
  - (B) Humor is more difficult to achieve than wit.
  - (C) Humorous people make friends easily.
  - (D) Humor and wit are genuine gifts.
  - (E) Witty people are not usually humorous, but humorous people are usually witty.

**GO ON TO THE NEXT PAGE.**

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

With the introduction in the 1950's of strikingly effective antipsychotic drugs such as chlorpromazine, the popularity of shock treatment began to wane. The decline was hastened by growing concern about the safety and effectiveness of ECT and by charges that it was being used too often and too indiscriminately in hospitals and mental institutions that were little more than "shock mills."

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



The village of Gorna-Sushitsa perches on an open slope facing out over tobacco fields. Below is the hazy Struma Valley, and beyond, Greece and Yugoslavia. Behind the village rise the rugged peaks of the Pirin. Mountains have a special meaning to Bulgarians, whose novelists and poets romanticized the exploits of the *Haiduks*, or Bulgarian outlaws, who harassed the ruling Turks in the mountainpasses. The Turkish Ottoman Empire dominated Bulgaria for five centuries, conscripting boys into the Janissaries—the sultan’s elite troops—and women into the harem. Toward the end of Ottoman rule, the empire had become inefficient and corrupt, a situation that encouraged the assertion of a Bulgarian identity. However, when the uprising finally exploded in 1876, the Ottoman soldiers quickly crushed the Bulgarian peasants and their few cannons of hollowed cherry logs.

36. The passage is primarily about the
- (A) works of Bulgarian novelists and poets
  - (B) scenic beauty of the Bulgarian countryside
  - (C) conflicts between Bulgarians and Ottomans
  - (D) advantages and disadvantages of the Ottoman influence in Bulgaria
  - (E) corruption within the Ottoman Empire
37. The village of Gorna-Sushitsa is located
- (A) in Bulgaria
  - (B) in Turkey
  - (C) in the Struma Valley
  - (D) on the highest peak of the Pirin
  - (E) in a tobacco field
38. According to the passage, which of the following is true of Bulgarian novelists and poets?
- (A) They spread false rumors about Turkish harassment.
  - (B) They treated the outlaws unjustly in their writings.
  - (C) They refused to take an active part in the struggle for liberation.
  - (D) They fantasized about outlaws who never existed.
  - (E) They glorified the outlaws who harassed the Turks.
39. The Ottoman Turks fostered the "assertion of a Bulgarian identity" (lines 8-9) by
- (A) secretly encouraging the Bulgarians to rebel
  - (B) reminding the Bulgarians of the glorious past
  - (C) being incompetent in their ability to rule
  - (D) indicating their unwillingness to rule Bulgaria any longer
  - (E) giving the Bulgarian leaders positions of national importance
40. The passage implies that the Bulgarians
- (A) outnumbered other minorities in the Ottoman Empire
  - (B) had poor military equipment and not much of it
  - (C) had a strong military force but poor leadership
  - (D) worked their way up to posts of command in the Ottoman Empire
  - (E) had much support from the Ottoman Empire for an uprising

## STOP

IF YOU FINISH BEFORE TIME IS CALLED,  
YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

---

**SECTION 3**  
**60 Questions**

This section consists of two different types of questions. There are directions and a sample question for each type.

Each of the following questions consists of one word followed by five words or phrases. You are to select the one word or phrase whose meaning is closest to the word in capital letters.

Sample Question:

CHILLY: (A) lazy (B) nice (C) dry (D) cold (E) sunny	(A) (B) (C) ● (E)
--	-------------------

- 
- |  |  |
|--|--|
| 1. DECEIVE:<br>(A) alter<br>(B) examine<br>(C) astonish<br>(D) mislead<br>(E) pretend                        | 5. CONFIDENTIAL:<br>(A) serious<br>(B) routine<br>(C) secret<br>(D) formal<br>(E) brief                    |
| 2. AIMLESS:<br>(A) without purpose<br>(B) without humor<br>(C) reluctant<br>(D) exclusive<br>(E) incompetent | 6. DEFICIENT:<br>(A) painful<br>(B) contrary<br>(C) alarming<br>(D) illegal<br>(E) lacking                 |
| 3. COMPASSION:<br>(A) sympathy<br>(B) honor<br>(C) shyness<br>(D) amazement<br>(E) courage                   | 7. INHABIT:<br>(A) occupy<br>(B) allow<br>(C) intervene<br>(D) repress<br>(E) transact                     |
| 4. EVACUATE:<br>(A) throw about<br>(B) empty out<br>(C) grope for<br>(D) smooth over<br>(E) cross off        | 8. REMINISCENCE:<br>(A) limitation<br>(B) contraction<br>(C) moderation<br>(D) recollection<br>(E) removal |

**GO ON TO THE NEXT PAGE.**

9. DAWDLE:  
(A) complain about  
(B) turn against  
(C) deny knowing  
(D) squander money  
(E) waste time
10. PROPHECY:  
(A) defeat  
(B) annoy  
(C) foretell  
(D) testify  
(E) prompt
11. INGENUITY:  
(A) availability  
(B) attractiveness  
(C) attentiveness  
(D) inventiveness  
(E) independence
12. CONVENTIONAL:  
(A) collected  
(B) related  
(C) actual  
(D) admirable  
(E) customary
13. VEND:  
(A) make  
(B) sell  
(C) support  
(D) slow  
(E) weave
14. ABYSS:  
(A) depression  
(B) valley  
(C) trench  
(D) corner  
(E) chasm
15. COMPETENT:  
(A) just  
(B) willing  
(C) firm  
(D) able  
(E) gentle
16. RATIFY:  
(A) approve  
(B) reside  
(C) liberate  
(D) magnify  
(E) explain
17. COMPEL:  
(A) violate  
(B) force  
(C) certify  
(D) justify  
(E) combine
18. AGILITY:  
(A) similarity  
(B) strength  
(C) nimbleness  
(D) anxiety  
(E) freshness
19. WRITHE:  
(A) slide  
(B) twist  
(C) raise  
(D) crumble  
(E) push
20. KINETIC:  
(A) moving  
(B) porous  
(C) pointed  
(D) finely spun  
(E) easily heard

GO ON TO THE NEXT PAGE.

21. ASCERTAIN:  
(A) give up  
(B) add to  
(C) join with  
(D) follow after  
(E) find out
22. INSINUATION:  
(A) legal claim  
(B) open admission  
(C) angry dispute  
(D) sly suggestion  
(E) unbiased report
23. ALOOF:  
(A) foreign  
(B) lasting  
(C) distant  
(D) pitiful  
(E) weird
24. RESIDUAL:  
(A) surrounded by  
(B) leftover  
(C) responsive to  
(D) finished  
(E) runaway
25. SURROGATE:  
(A) patron  
(B) moderator  
(C) retailer  
(D) substitute  
(E) guide
26. OSTENTATIOUS:  
(A) strong  
(B) rapid  
(C) shrewd  
(D) showy  
(E) sane
27. ADJUNCT:  
(A) endeavor  
(B) impatience  
(C) ridicule  
(D) compulsion  
(E) accessory
28. ASSAILABLE:  
(A) vulnerable  
(B) medicinal  
(C) permissible  
(D) premature  
(E) corroded
29. ENTOURAGE:  
(A) attendants  
(B) journeys  
(C) schedules  
(D) displays  
(E) awards
30. IMPASSE:  
(A) deadlock  
(B) distortion  
(C) variance  
(D) neutrality  
(E) recklessness



The following questions ask you to find relationships between words. For each question, select the answer choice that best completes the meaning of the sentence.

Sample Question:

Kitten is to cat as	
(A) fawn is to colt	
(B) puppy is to dog	
(C) cow is to bull	
(D) wolf is to bear	
(E) hen is to rooster	(A) ● (C) (D) (E)

Choice (B) is the best answer because a kitten is a young cat just as a puppy is a young dog. Of all the answer choices, (B) states a relationship that is most like the relationship between kitten and cat.

- |  |  |   |
|--|--|---|
| <p>31. Drug is to pharmacist as</p> <p>(A) vegetable is to vegetarian</p> <p>(B) telephone is to electrician</p> <p>(C) dictionary is to teacher</p> <p>(D) meat is to butcher</p> <p>(E) pencil is to student</p> | <p>35. Frog is to toad as</p> <p>(A) cat is to panther</p> <p>(B) dog is to wolf</p> <p>(C) hog is to boar</p> <p>(D) fish is to whale</p> <p>(E) turtle is to tortoise</p>            | 3 |
| <p>32. Choreographer is to dancers as director is to</p> <p>(A) playwrights</p> <p>(B) authors</p> <p>(C) poets</p> <p>(D) painters</p> <p>(E) actors</p>  | <p>36. Liter is to quart as</p> <p>(A) ruler is to inch</p> <p>(B) pint is to mile</p> <p>(C) meter is to yard</p> <p>(D) day is to week</p> <p>(E) degree is to temperature</p>       |   |
| <p>33. Circle is to sphere as</p> <p>(A) square is to cube</p> <p>(B) triangle is to rectangle</p> <p>(C) pyramid is to cone</p> <p>(D) point is to dot</p> <p>(E) hexagon is to trapezoid</p>                     | <p>37. Skit is to play as</p> <p>(A) couplet is to word</p> <p>(B) limerick is to poem</p> <p>(C) verse is to metaphor</p> <p>(D) rhythm is to line</p> <p>(E) figure is to speech</p> |   |
| <p>34. Clot is to blood as</p> <p>(A) egg is to shell</p> <p>(B) curd is to milk</p> <p>(C) water is to mud</p> <p>(D) flour is to yeast</p> <p>(E) grape is to wine</p>   | <p>38. Prolong is to time as expand is to</p> <p>(A) space</p> <p>(B) infinity</p> <p>(C) extraction</p> <p>(D) dignity</p> <p>(E) bulge</p>   |   |

**GO ON TO THE NEXT PAGE.**

39. Immaculate is to dirt as  
(A) indecent is to person  
(B) inclement is to rain  
(C) immortal is to heaven  
(D) impious is to volume  
(E) innocent is to guilt
40. Dodo is to bird as dinosaur is to  
(A) mammal  
(B) conifer  
(C) octopus  
(D) reptile  
(E) amphibian
41. Intangible is to touching as  
(A) incisive is to cutting  
(B) inadvertent is to seeing  
(C) inaudible is to hearing  
(D) inarticulate is to reading  
(E) incendiary is to burning
42. Dungeon is to castle as  
(A) tower is to mansion  
(B) seat is to car  
(C) hovel is to home  
(D) brig is to ship  
(E) jail is to police
43. Woodwind is to clarinet as percussion is to  
(A) flute  
(B) cymbal  
(C) trumpet  
(D) harp  
(E) violin
44. Lapel is to chest as  
(A) sleeve is to body  
(B) hat is to hood  
(C) belt is to trousers  
(D) shoe is to boot  
(E) cuff is to arm
45. Map is to land as  
(A) negative is to print  
(B) diagram is to machine  
(C) camera is to film  
(D) crayon is to paint  
(E) lens is to glasses
46. Resign is to occupation as abdicate is to  
(A) authority  
(B) passion  
(C) restriction  
(D) contemplation  
(E) motivation
47. Recalcitrant is to obedience as insolent is to  
(A) luck  
(B) stealth  
(C) fear  
(D) respect  
(E) anger
48. Hive is to swarm as  
(A) ocean is to shells  
(B) corral is to herd  
(C) caterpillar is to moth  
(D) pride is to lions  
(E) grass is to grasshopper
49. Perimeter is to figure as  
(A) curvature is to arch  
(B) symmetry is to shape  
(C) outline is to object  
(D) angularity is to square  
(E) height is to range
50. Arrow is to quiver as  
(A) water is to canteen  
(B) net is to ball  
(C) muzzle is to gun  
(D) sneaker is to running  
(E) board is to diving

51. Hungry is to ravenous as communicative is to  
(A) opulent  
(B) garrulous  
(C) fickle  
(D) energetic  
(E) sprightly
52. Altruistic is to benevolence as choleric is to  
(A) abbreviation  
(B) belligerence  
(C) desolation  
(D) illiteracy  
(E) nudity
53. Obsessed is to interested as  
(A) weak is to ill  
(B) ferocious is to unexpected  
(C) pristine is to clean  
(D) moist is to humid  
(E) fashionable is to new
54. Scholarly is to pedantic as devout is to  
(A) hated  
(B) placated  
(C) eager  
(D) depressed  
(E) sanctimonious
55. Entice is to browbeat as  
(A) coax is to intimidate  
(B) seduce is to beguile  
(C) divert is to entertain  
(D) inform is to teach  
(E) swindle is to cheat
56. Variegated is to color as  
(A) polymorphous is to shape  
(B) amorphous is to skeleton  
(C) quadrilateral is to polygon  
(D) aeronautic is to plane  
(E) celestial is to planet
57. Window is to sill as door is to  
(A) bolt  
(B) knob  
(C) frame  
(D) threshold  
(E) casement
58. Fanatic is to zealot as  
(A) ardent is to devotee  
(B) expectant is to benefactor  
(C) pensive is to seer  
(D) formal is to judge  
(E) modest is to patriot
59. Crush is to pulverize as  
(A) rip is to tear  
(B) cut is to shred  
(C) drop is to break  
(D) end is to finish  
(E) constrict is to confine
60. Banal is to conversation as  
(A) dangerous is to situation  
(B) sour is to vinegar  
(C) insipid is to food  
(D) doubtful is to person  
(E) reproachful is to action

**STOP**

IF YOU FINISH BEFORE TIME IS CALLED,  
YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.



**SECTION 4**  
**25 Questions**

Following each problem in this section, there are five suggested answers. Work each problem in your head or in the blank space provided at the right of the page. Then look at the five suggested answers and decide which one is best.

Note: Figures that accompany problems in this section are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale.

Sample Problem:

5,413	(A) 586
- 4,827	(B) 596
<hr/>	(C) 696
	(D) 1,586
	(E) 1,686

(A)  (B)  (C)  (D)  (E)

1. Joe had flags of 22 different countries in his collection. His uncle brought him 8 new flags. Of these, 3 were from countries he already had in his collection. How many flags of different countries did Joe then have?

USE THIS SPACE FOR FIGURING.

- (A) 22  
(B) 25  
(C) 27  
(D) 30  
(E) 33
2. At 6 a.m. the temperature was 5 degrees below zero. If it had risen 11 degrees by noon, then the temperature at noon was
- (A) 16° below zero  
(B) 6° below zero  
(C) 5° below zero  
(D) 6° above zero  
(E) 16° above zero

**GO ON TO THE NEXT PAGE.**

3. According to the graph in Figure 1, Maria spent about how much money on school supplies?
- (A) \$1.00
  - (B) \$1.70
  - (C) \$2.00
  - (D) \$2.50
  - (E) \$3.00

USE THIS SPACE FOR FIGURING.

4

HOW MARIA USED HER \$5 ALLOWANCE

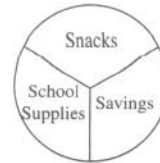


Figure 1

4. If  $\frac{1}{4} N = 12$ , then  $\frac{1}{2} N =$
- (A) 3
  - (B) 6
  - (C) 24
  - (D) 48
  - (E) 96

5. Figure 2 shows a fence with posts 10 meters apart. A cow is tied to the center post by a rope 20 meters long. Which best shows the size and shape of the region in which the cow can graze?

- (A)
- (B)
- (C)
- (D)
- (E)

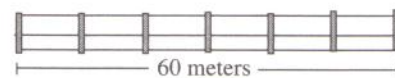


Figure 2

**GO ON TO THE NEXT PAGE.**

6. Nancy prepared exactly twice as many hamburgers as hot dogs for her party. Which could be the total number of hamburgers and hot dogs she prepared?

(A) 10  
 (B) 13  
 (C) 16  
 (D) 18  
 (E) 25

USE THIS SPACE FOR FIGURING.

4

7. According to the graph in Figure 3, Jackie's average salary for the 4 years 2004 through 2007 was

(A) \$16,000  
 (B) \$16,750  
 (C) \$17,000  
 (D) \$17,500  
 (E) \$17,750

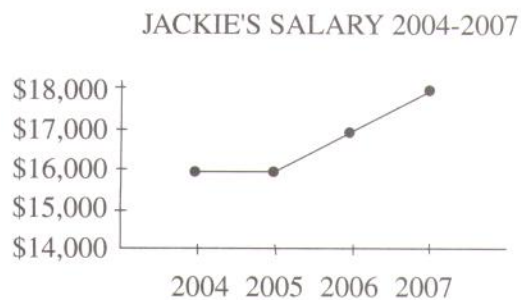


Figure 3

Questions 8-10 refer to the following definition.

For all real numbers  $f$  and  $p$ ,  $\boxed{f \mid p} = (f + p) + (f \times p)$ .

(Example:  $\boxed{3 \mid 5} = (3 + 5) + (3 \times 5) = 8 + 15$ .)

8.  $\boxed{6 \mid 2} =$

(A) 3  
 (B) 8  
 (C) 12  
 (D) 16  
 (E) 20

9. If  $\boxed{N \mid 4} = 54$ , then  $N =$

(A) 5  
 (B) 10  
 (C) 11  
 (D) 14  
 (E) 50

GO ON TO THE NEXT PAGE.

10. If  $f$  is any number not equal to zero, which of the following must be true?

USE THIS SPACE FOR FIGURING.

4

I.  $\boxed{f} \boxed{p} = \boxed{p} \boxed{f}$

II.  $\boxed{f} \boxed{0} = 0$

III.  $\boxed{f} \boxed{\frac{1}{f}} = 1$

- (A) I only  
(B) II only  
(C) III only  
(D) I and II  
(E) II and III

11. When two square regions overlap, what can the shape of the overlapping portion be?

- I. Square  
II. Triangular  
III. Rectangular

- (A) I only  
(B) II only  
(C) III only  
(D) I and II only  
(E) I, II, and III

12. Of the following, 15 percent of \$8.95 is closest to

- (A) \$1.95  
(B) \$1.75  
(C) \$1.50  
(D) \$1.35  
(E) \$1.00

GO ON TO THE NEXT PAGE.

13. Betsy raked leaves from 9:30 a.m. to 11:00 a.m. and finished  $\frac{1}{4}$  of the yard. She wants to finish raking the yard by 6:30 p.m. If she plans to rake at the same rate, what is the latest time that she can start raking the leaves again?

USE THIS SPACE FOR FIGURING.

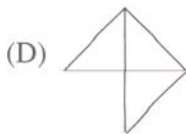
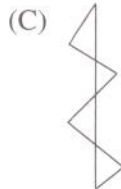
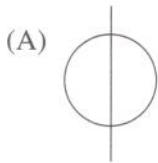
4

- (A) 12:30 p.m.  
(B) 1:00 p.m.  
(C) 2:00 p.m.  
(D) 3:30 p.m.  
(E) 5:00 p.m.

14. John has  $x$  dollars. Ann has \$5 more than John. If Ann gives John \$10, then, in terms of  $x$ , how many dollars will Ann have?

- (A)  $x - 15$   
(B)  $x - 10$   
(C)  $x - 5$   
(D)  $x + 5$   
(E)  $x + 15$

15. Which figure CANNOT be drawn without lifting the pencil or retracing?



16. If 0.39 is about  $\frac{N}{10}$ , then  $N$  is closest to which of the following?

USE THIS SPACE FOR FIGURING.

**4**

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

17. If the average of 5 consecutive whole numbers is 12, what is the largest number?

- (A) 14  
(B) 16  
(C) 17  
(D) 22  
(E) 60

18. Automobile sales in the United States dropped from 10.7 million units one year to 9.3 million the next year. The decrease was closest to what percent?

- (A) 1%  
(B) 13%  
(C) 14%  
(D) 15%  
(E) 20%

$$17 \overline{) A} \quad \begin{array}{l} 25 \text{ remainder } 1 \\ \hline \end{array} \quad 17 \overline{) B} \quad \begin{array}{l} 26 \\ \hline \end{array}$$

19. In the problems above,  $B - A =$

- (A) 0  
(B) 1  
(C) 16  
(D) 18  
(E) 24

**GO ON TO THE NEXT PAGE.**

- 
20. What is the greatest number of squares 5 centimeters on a side that can be cut from a rectangular piece of construction paper 60 centimeters long and 45 centimeters wide?

USE THIS SPACE FOR FIGURING.

4
---

- (A) 75  
(B) 90  
(C) 96  
(D) 108  
(E) 540
- 

21. A store regularly sells books at 20% off the list price. At a sale its regular prices are reduced 10 percent. The sale price is what percent of the list price?

- (A) 30%  
(B) 70%  
(C) 72%  
(D) 79%  
(E) 85%
- 

22. In a class,  $\frac{1}{8}$  of the boys and  $\frac{1}{4}$  of the girls play the piano, and 3 times as many girls as boys play the piano. If there are 100 boys and girls in the class, how many boys play the piano?

- (A) 3  
(B) 5  
(C) 12  
(D) 24  
(E) 25
- 

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

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

GO ON TO THE NEXT PAGE.



24. If  $x$  is greater than  $y$  and  $y$  is greater than 1, which of the following is LEAST?

USE THIS SPACE FOR FIGURING.

4

- (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. The price of a cold roast beef lunch is \$4.80 and the price of a hot roast beef lunch is \$5.40. If both prices include 20 percent for tax and tip, what is the difference in price before tax and tip?
- (A) \$0.12  
(B) \$0.40  
(C) \$0.50  
(D) \$0.60  
(E) \$0.72

**STOP**

IF YOU FINISH BEFORE TIME IS CALLED,  
YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.