GRE – PBT 01

The test is of five sections.
Take the sections and the questions in the order in which they appear.
The time limit for each section is different, which is given before every section.

AWA

Write the essay in the time frame provided. You can attach more sheets if required.

VERBAL

There are four types of questions:
ANALOGIES
Directions: Each of the following items consists of a related pair of words or phrases presented m capital letters, followed by five lettered pairs of words or phrases presented in lower case letters. For each question, choose the lettered pair that has the same relationship that is expressed in the capitalized pair.
EXAMPLE   UNFETTERED: PINIONED::
1. recite: practiced   2. sully: impure 3. enlightened: ignorant
4. revere: unrecognized   5. adore: cordial
The answer is 3. To be unfettered is to be free, to be pinioned is to be chained down. These are antonyms, so are to be enlightened and to be ignorant.
ANTONYMS
Directions: Following the word in upper case are 5 options. Select the option that is most nearly opposite in meaning to the word in the upper case.
EXAMPLE: INSERT:
1. remove   2. improve   3. revise
4. lessen   5. copy
The answer is 1, since "remove" is the opposite of "insert".
SENTENCE COMPLETION
DIRECTIONS: Each sentence in this part has one or two missing words, as indicated by blank/s. Choose the word/ set of words that best fit the meaning of the sentence.
EXAMPLE: Because no comprehensive------- exist regarding personal reading practices, we do not know, for example, the greatest number of books read in an individual lifetime.
1. records   2. instincts   3. remedies
4. proposals   5. commercials
The answer is 1, since "records" completes the sentence in the most meaningful way.
READING COMPREHENSION
Read the passage carefully and answer the questions. Do not mark any part of the passage or write anything on it.

QUANTITATIVE

There are three types of questions:
QUANTITATIVE COMPARISON
Two quantities are given in column A and B. Compare them and answer accordingly. <u>There are only four options, and not five.</u>
EXAMPLE:
            Column A   Column B
            (3/2) – (1/2)   (7/8) – (1/8)
A. The quantity in Column A is greater   B. The quantity in Column B is greater
C. The two quantities are equal.   D. The relationship cannot be determined.
DATA INTERPRETATION
Some information will be provided in form of a chart, graph, table or a combination of these. Answer the questions based on the information provided.
PROBLEM SOLVING
Answer the question using the information provided.

As in the actual CBT, either the Quantitative or the Verbal section is repeated. One of them will be a dummy section, but as a test-taker, you will not know which is the dummy section.

Section 1 – AWA (Issue)

Analysis of an Issue:
Time – 45 minutes

In this section, you will have 45 minutes to plan and compose a response that presents your perspective on the topic you selected. A response on any topic other than the one you selected will receive a score of zero. You will have a choice between two Issue topics. Each topic will appear as a brief quotation that states or implies an issue of general interest. You are free to accept, reject, or qualify the claim made in the topic, as long as the ideas you present are clearly relevant to the topic you select. Support your views with reasons and examples drawn from such areas as your reading, experience, observations, or academic studies.

Before you make a choice, read each topic carefully. Then decide on which topic you could write a more effective and well-reasoned response. GRE readers who are college and university faculty will read your response and evaluate its overall quality, based on how well you

- consider the complexities and implications of the issue
- organize, develop and express your ideas on the issue
- support your ideas with relevant reasons and examples
- control the elements of standard written English.

You may want to take a few minutes to think about the issue you have chosen and to plan a response before you begin writing. Be sure to develop your ideas fully and organize them coherently, but leave time to read what you have written and make any revisions that you think are necessary.

Timing will begin when you see the choice of issues.

Issue 1:
"Colleges and universities should offer more courses on popular music, film, advertising, and television because contemporary culture has much greater relevance for students than do arts and literature of the past."

Issue 2:
"At various times in the geological past, many species have become extinct as a result of natural, rather than human, processes. Thus, there is no justification for society to make extraordinary efforts, especially at a great cost in money and jobs, to save endangered species."

Discuss the extent to which you agree or disagree with the opinion stated above. Support your views with reasons and/or examples form your own experience, observations, or reading.

Space for Rough work for Analysis of Issue

Section 2 – AWA (Argument)

Analysis of an Argument:
Time – 30 minutes.

You will have 30 minutes to plan and write a critique of an argument presented in the form of a short passage. A critique of any other argument will receive a score of zero.

Analyze the line of reasoning in the argument. Be sure to consider what, if any, questionable assumptions underlie the thinking and, if evidence is cited, how well it supports the conclusion.

You can also discuss what sort of evidence would strengthen or refute the argument, what changes in the argument would make it more logically sound, and what additional information might help you better evaluate its conclusion. *Note that you are not being asked to present your views on the subject*.

GRE readers who are college and university faculty will read your critique and evaluate its overall quality, based on how well you

- identify and analyze important features of the argument
- organize, develop and express your critique of the argument
- support your critique with relevant reasons and examples
- control the elements of standard written English

You may want to take a few minutes to evaluate the argument and to plan a response. Be sure to develop your ideas fully and organize them coherently, but leave time to read what you have written and make any revisions that you think are necessary.

Timing will begin when you see the topic.

The following appeared in the editorial section of a local newspaper.

"The librarians in our town's school system have reported that the number of trips that our students make to their school library on a voluntary basis has decreased significantly in recent years. For example, the average seventh-grade student visited the school library five times last year, but four of those visits were part of required classroom activities. This shows that our students are reading less than in the past. To address this problem, our town needs to improve the atmosphere of the libraries so that they will be comfortable places in which to work. If students view the libraries as uncomfortable, then they are unlikely to want to spend much time there."

Discuss how well reasoned you find this argument. In your discussion be sure to analyze the line of reasoning and the use of evidence in the argument. For example, you may need to consider what questionable assumptions underlie the thinking and what alternative explanations or counterexamples might weaken the conclusion. You can also discuss what sort of evidence would strengthen or refute the argument, what changes in the argument would make it more logically sound, and what, if anything, would help you better evaluate its conclusion.

Space for Rough work for Analysis of Argument

Section 3 – Quantitative

The duration of this section is **45 minutes.**
There are 28 questions.
Answer the questions as they appear.
Do not go back to any question.
Do not change your answer.
There is no negative marking.

1.   Area of rectangle ABCD = 120, AD = 40

Column A	Column B
AB+ BC	AC

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

2. $x/y = 1$

Column A	Column B
x^2	y^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 relationship cannot be determined.

3. $[a^2 - b^2] / [a - b]^2$ is equal to

A. $a + b$
B. $a - b$
C. $(a + b) / (a - b)$
D. $(a - b) / (a + b)$
E. 1

How your savings work for you

Mortgages 58.6%
Cash on hand 3.9%
Bonds 29.3%
Stocks 5.2%
Other assets 3%

4.   About how many degrees (to the nearest degree) are in the angle of the sector representing mortgages?

A. 59
B. 106
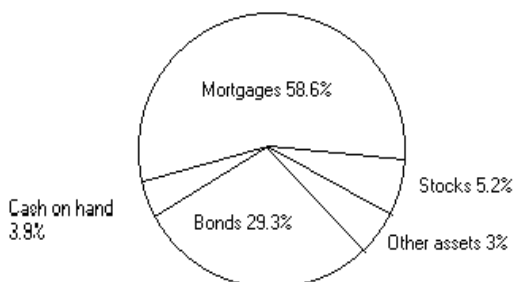C. 211
D. 246
E. 318

5.   What percent of the amount of cash on hand is the money invested in stocks ?

A. .75
B. 1.3
C. 9.1
D. 75
E. 133.3

6.   The annual rate of interest from "other assets" is 4.8%. If the total assets of the bank are 57.6 million dollars, what is the annual income from " other assets" ?

A. 82,944
B. 921,600
C. 1,728000
D. 2,764,800
E. 3,600,000

7.

Column A	Column B
(1/2) + (1/3)	2/5

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

8.

Column A	Column B
0.4%	4/1000

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

9.

Column A	Column B
.0005	1/2%

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

10. A large pie serves seven people. How many large pies will be needed to serve 184 people at a banquet?

A. 26
B. 27
C. 28
D. 29
E. 30

11.

Column A	Column B
3.5 %	35 / 1000

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

12.

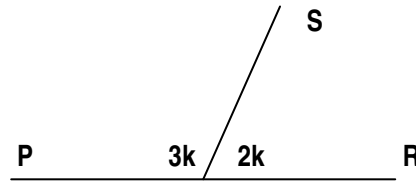| Column A	Column B
$7+7+7 \ / -7-7-7$	1

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

13. By how much is 3/7 larger than 20% of 2?

A. 1/35
B. 1/7
C. 4/7
D. 3 3/7
E. 3 4/7

14. In parallelogram EFGH, EF + EH = 20

Column A	Column B
EF + FG	EG

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

15. if $0 < s < r$ and s is equal to the difference between r and s, then s =

A. 1
B. 1/2
C. r/s
D. r/3
E. r/2

WEIGHT DISTRIBUTION IN STANDARD MAN	
(Total body weight 70,000 grams)	
Organ	Weight (grams)
Muscles	30,000
Skeleton	10,000
Blood	5,000
Gastro-intestinal tract	2,000
Lungs	1,000
Liver	1,700
Brain	1,500

16. What % (to the nearest 1/10 of a %) of total body weight is liver ?

A. .4
B. 1.2
C. 2.4
D. 4.1
E. 24

17. What % of weight of the brain is the gastrointestinal tract ?

A. 20
B. 33.33
C. 75
D. 120
E. 133.33

18. If 40% of the weight of the blood is made up of cells what % (to the nearest $^1/_{10}$ of a %) of total body weight is made up of blood cells ?

A. 1.4
B. 2.8
C. 3.6
D. 7.1
E. 9.9

19. If the weight of the skeleton is represented as g grams, the total body weight is represented as -

A. 7g
B. g + 6
C. 60g
D. g + 60
E. 70,000g

20. In the figure above, PQR is a straight line. What is the value of k = ?

A. 36
B. 45
C. 64
D. 72
E. 80

21. $0 < k < 1$

Column A	Column B
k^2	k

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

22. If p = 4q and q = 2r find r in terms of p

A. p/2
B. p/4
C. p/8
D. 4p
E. 8p

23. If p - 3 = q + 3 what does q - p equal

A. 6
B. 1
C. 0
D. -1
E. -6

24. x - y = 4

Column A	Column B
x	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 relationship cannot be determined.

25.   x, y and 90^0 are three angles of a triangle

Column A	Column B
x + y	90 degrees

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

26.   0 > a > b > -1

Column A	Column B
a	b

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

27.   If a rectangle with one side 12 has area 108, what is the length of the diagonal ?

A. 14
B. 15
C. 16
D. 17
E. 18

28.   If the length of one leg of the right triangle with diagonal 20 is 16, calculate its area

A. 84
B. 92
C. 96
D. 104
E. 108

END OF SECTION 3.

SECTION 4 STARTS ON THE NEXT PAGE.

Section 4 – Verbal

The duration of this section is **30 minutes.**
There are 30 questions.
Answer the questions as they appear.
Do not go back to any question.
Do not change your answer.
There is no negative marking.

In most corners of the world malnutrition is plainly a matter of outright insufficiency of food for the population - where the majority of the people do not obtain enough food calories to meet minimal needs for support of physical work and for maintenance of health. Elsewhere the problem may be not one of insufficient calories but of lack of specific nutrients essential for health.

In Latin America, as in other places, the dread protein deficiency disease kwashiorkor is taking its heavy toll of children's lives. Strategic vitamins and minerals may be lacking due to traditional diets which are nutritionally imbalanced. Here people continue their eating pattern year after year without knowledge of what their dietary habits are doing to themselves and to future generations.

With a basic knowledge of nutritional needs and deficiencies, efforts could be directed to finding food substitutes which could meet these needs. Mixtures of vegetable proteins, like soybeans and peanuts, could provide an abundance of cheap, useful protein where meat, eggs, and milk are not within economic reach of large groups in the population. Efforts could also be expended on increasing the agricultural productivity in specific regions; where large areas are given over to relatively inefficient use as grazing land. the intensive production of vegetable protein crops could bring remedial nutrition to an under-nourished population. Elsewhere, enrichment with specific vitamins ;and minerals of traditional staple foods that are deficient in essential nutritive factors could 21 wipe out disabling deficiency diseases, like beriberi or pellagra, almost overnight. Similarly' addition of minute amounts of inexpensive iodine to salt could benefit large areas where e endemic goiter has been accepted as an integral part of life for generations

1.   Vitamin deficiencies cause

       A. kwashiorkor
       B. pellagra
       C. goiter
       D. luck of calories
       E. food substitutes

2.   Cheap protein substitutes for milk, eggs, and meat

       A.   may be obtained from vitamins and minerals
       B.   are being sought by scientists
       C.   can be gotten from soybeans
       D.   can be found in iodized salt
       E.   are not needed

3.   In the last sentence, the word which best indicates the frequency of occurrence of goiter is

       A. endemic
       B. inexpensive
       C. minute
       D. similarly
       E. generations

4.   The peanut is

       A. inedible
       B. of little nutritional value
       C. difficult to grow
       D. a plant that exhausts the soil
       E. a source of protein

5.   The major cause of malnutrition in the world is lack of

       A. protein
       B. vitamins
       C. minerals
       D. iodine
       E. food

6.   Kwashiorkor

       A. is especially harmful lo children
       B. resembles beriberi
       C. is caused by starvation
       D. affects adults only
       E. is confined to Latin America

7. The title that best expresses the ideas of this passage is

   A. Science and Agriculture
   B. Eliminating Starvation
   C. Improving Our Diet
   D. The Importance of Calories
   E. Combating Malnutrition

8. According to the passage, the addition of iodine to people's food is helpful in eradicating

   A. beriberi
   B. goiter
   C. kwashiorkor
   D. pellagra
   E. malnutrition

9. ENIGMATIC:

   A. enriched
   B. clear
   C. frothy
   D. frenetic
   E. genuine

10. At the church the visitors _____ with the _____ parents of the children drowned in the lake.

    A. mingled...grieving
    B. chatted...ensconced
    C. commiserated...bereaved
    D. lamented...waiting
    E. spoke...sorrowing

11. These sporadic attacks seem to indicate that the enemy is waging a war of _____ rather than attacking us directly.

    A. fragments
    B. attrition
    C. intensity
    D. barbarism
    E. words

12. RETICENCE:

    A. silence
    B. loquaciousness
    C. quiescence
    D. patience
    E. surrender

13. TRUCULENT:

    A. juicy
    B. desiccated
    C. determined
    D. diffident
    E. gentle

14. JUDICIOUS:

    A. thoughtful
    B. criminal
    C. foolish
    D. plausible
    E. impulsive

15. PEACEFUL : HALCYON ::

    A. calm : belligerent
    B. military : pacific
    C. belligerent : marital
    D. placid : serene
    E. negotiation : attack

16. He had been found guilty of _____ on so many occasions that his friends no longer _____ him.

    A. peccadillos...watched
    B. jokes..admired
    C. mischief....followed
    D. mendacity.. believed
    E. tenacity.. observed

17. INEPT:

    A. competent
    B. facile
    C. useful
    D. Fitting
    E. artful

18. CIRCUITOUS:

    A. encompassing
    B. circumscribing
    C. direct
    D. drastic
    E. bombastic

19. Now that I realize the extent of your _____ , I feel that it will be impossible for me to trust you implicitly in the future.

A. chicanery
B. lapse
C. ingenuousness
D. inconsistency
E. inclemency

20. It is remarkable that a man so in the public eye, so highly praised and imitated, can retain his _____ and reticence.

A. decorum
B. dogmas
C. bravado
D. idiosyncrasies
E. humility

21. INTRINSIC : EXTRINSIC::

A. intentional : unintentional
B. vivid : dull
C. real : simulated
D. intentional : accidental
E. inherent : extraneous

22. FOOD : CONDIMENTS ::

A. edible : inedible
B. conversation : wit
C. viands : space
D. native : exotic
E. eating : smoking

23. FURTIVE:
A. inert
B. contrary
C. aboveboard
D. concealed
E. unintentional

24. SPY : SECRETIVE ::
A. entirely : wholly
B. pathos : pathetic
C. fan : partisan
D. elephant : heavy
E. candidate : bipartisan

25. SAINT : CANONIZATION

A. sinner : expiation
B. child :confirmation
C. youth : graduation
D. priest: parishioner
E. king : coronation

26. PRUDERY : MODESTY ::

A. reserve : shyness
B. freedom : license
C. introvert : extrovert
D. pedantry : scholarship
E. conviction : belief

27. BRAGGART : HUMILITY ::

A. traitor : repentance
B. amiss : aright
C. heretic : religion
D. prolix : bore
E. rebel : conventionality

28. EQUITABLE:

A. variable
B. unfair
C. imperturbable
D. undecided
E. unshakable

29. LACONIC:

A. intemperate
B. stoic
C. epicurean
D. heterosexual
E. verbose

30. He is so _____ that he cannot be disturbed by _____ matters.
A. involved..simple
B. excited..ordinary
C. spiritual..mundane
D. secular..temporal
E. happy..somber

END OF SECTION 4.

SECTION 5 STARTS ON THE NEXT PAGE.

This space has been intentionally left blank.

Section 5 – Quantitative

The duration of this section is **45 minutes.**
There are 28 questions.
Answer the questions as they appear.
Do not go back to any question.
Do not change your answer.
There is no negative marking.

1. In rectangle ABCD, AD = 40 and area of ABCD= 1200

Column A	Column B
Length of BC	Length of AC

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
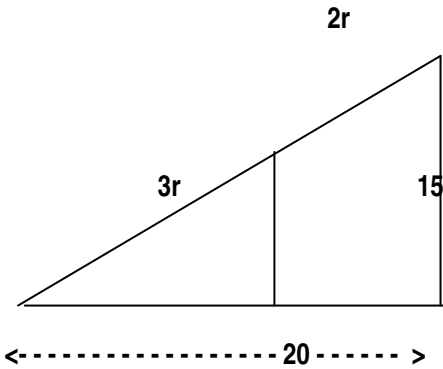D. The relationship cannot be determined.

2. The area of triangle ABC = 72 the measure of angle A is equal to the measure of angle C, which is 45^0.

Column A	Column B
length of AC + length of BC	length of AB

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

3. L is east of M and west of N. J is southeast of N. M is southeast of F. Which is farthest west?

A. F
B. L
C. J
D. M
E. n

4. If x = ky, and k is a constant, what is the missing value of y in the table ?

x	5	5/9
y	3	?

A. 1/27
B. 1/3
C. 25/27
D. 27/25
E. 3

5. In the triangle above r = ?

A. 3
B. 4
C. 10
D. 6
E. 5

6. p*q = 0

Column A	Column B
p	q

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

Air Pollutant Emissions, In millions of metric tons
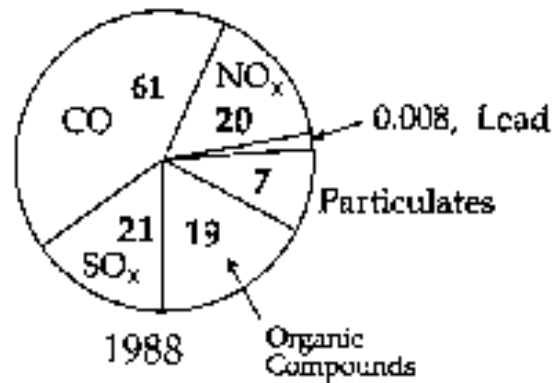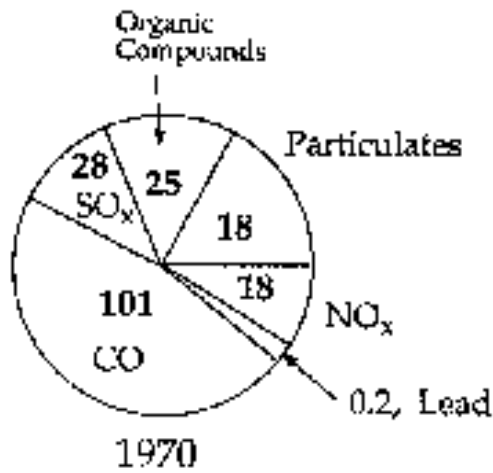
1970

1988

For questions 7 – 11, refer to the charts.

7.   Select the emission that increased in tonnage from 1970 to 1988

A. NO_x
B. SO_x
C. Organic compounds
D. particulate
E. lead

8.   Calculate the percentage decrease in lead emissions between 1970 and 1988

A. 4%
B. 22%
C. 48%
D. 75%
E. 96%

9.   Estimate the percentage contribution of CO to the emissions listed in the charts in 1970

A. 47%
B. 49%
C. 51%
D. 53%
E. 55%

10.   Vehicle emissions contributed 65, 9 and 6 million metric tons of CO organic compounds and NO_x respectively in 1970 estimate their percentage contribution to the total emissions

A. 42%
B. 44%
C. 46%
D. 48%
E. 50%

11.   If the circle graph of 1970 were drawn to scale, approximate the angle that would represent lead

A. 0.04 degrees
B. 0.4 degrees
C. 0.8 degrees
D. 2 degrees
E. 4 degrees

12. $f > 0, g > 0, f <> g$

Column A	Column B
$f - g$	$f^2 – g^2/ (f - g)$

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

13. If $x = -1$, which of the following is the greatest?

A. $x^2 - 1$
B. $-1/x$
C. $1+x$
D. $1/x$
E. $1-x$

14. $3x + 4y = 12$

Column A	Column B
x	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 relationship cannot be determined.

15. $p/7 = 7/p$; $p < 0$

Column A	Column B
p/14	-1/7

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.
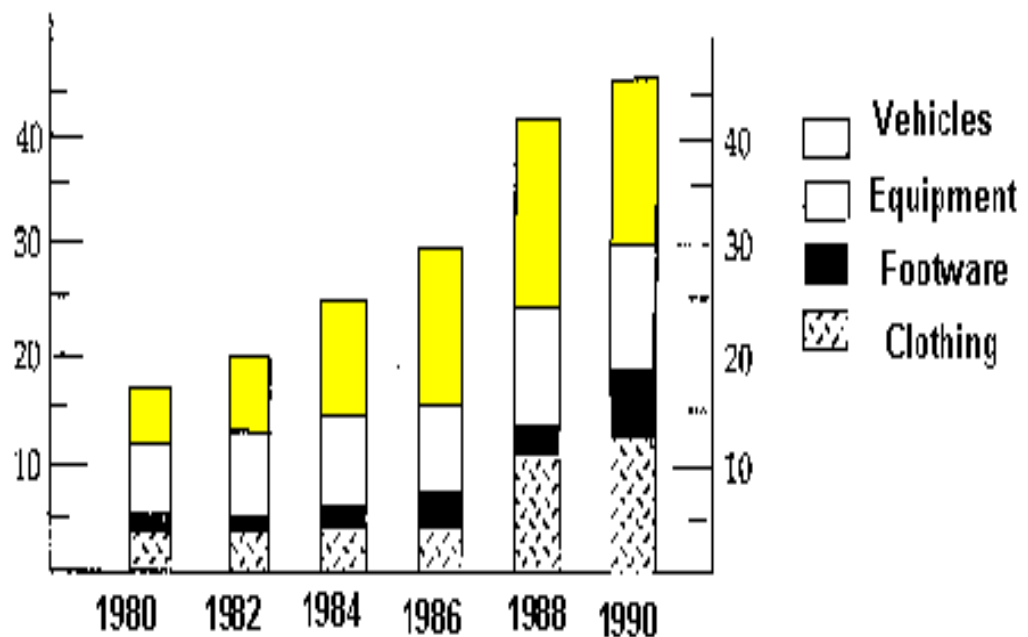
16. $r*s*t = 0$, $r > s$

Column A	Column B
rt	st

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

Sporting Goods Sales, in billions of dollars

For questions 17 – 21, refer to the chart.

17.   Estimate the sales in sport footwear in 1990

   A. $29 billion
   B. $18 billion
   C. $13 billion
   D. $11 billion
   E. $6 billion

18.   In four of the six years graphed, the sales of one commodity remained relatively constant select that commodity

   A. vehicles
   B. equipment
   C. footwear
   D. clothing
   E. none of the above

19.   Estimate the percent increase in the sales of sport clothing from 1986-1988

   A. 220%
   B. 180%
   C. 120%
   D. 80%
   E. 60%

20.   Estimate the percent increase in the total sales for sporting goods from 1980 to 1990

   A. 110%
   B. 130%
   C. 170%
   D. 230%
   E. 290%

21.   If sporting goods accounted for 2.6% of all retail sales in 1988, estimate the total retail sales in 1988

   A. 16 trillion
   B. 1.6×10^{11}
   C. 160×10^{10}
   D. $16\verb|^|10^{12}$
   E. 160 billion

22.

Column A	Column B
y^2	$y(y+2)$

   A. The quantity in Column A is greater
   B. The quantity in Column B is greater
   C. The two quantities are equal.
   D. The relationship cannot be determined.

23. A dealer bought n articles for x dollars one year and for y dollars (y>x) the following year. What was his increase in cost in dollars per article ?

A. y-x/n
B. x-y/n
C. y/n
D. y/x
E. n/y-x

24. If p and q are positive numbers, which of the following is always true ?
(I) $\sqrt{(p^2 - q^2)} = p - q$
(II) $\sqrt{(p^2 * q^2)} = pq$
(III) $\sqrt{(p^2 / q^2)} = p/q$

A. I and II only
B. II and III only
C. III only
D. I, II and III
E. II only

25. If p is 50% more than q then q is what percent less than p ?

A. 66 2/3
B. 50
C. 40
D. 33 1/3
E. 25

26. If p dishes cost d dollars, n dishes at the same rate will cost, in dollars.

A. pd/n
B. nd/p
C. npd
D. np/d
E. p/nd

27.

Column A	Column B
1/500	0.02%

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

28. a and b are successive prime numbers; a is even

Column A	Column B
ab	a+b

A. The quantity in Column A is greater
B. The quantity in Column B is greater
C. The two quantities are equal.
D. The relationship cannot be determined.

END OF SECTION 5.

END OF THE TEST.

<u>This space has been intentionally left blank.</u>

Answer Key – PBT 01

Section 3	Section 4	Section 5
1 A	1 B	1 B
2 C	2 C	2 A
3 C	3 A	3 A
4 C	4 E	4 B
5 E	5 E	5 E
6 A	6 A	6 D
7 A	7 E	7 A
8 C	8 B	8 E
9 B	9 B	9 D
10 B	10 C	10 A
11 C	11 B	11 B
12 B	12 B	12 B
13 A	13 E	13 E
14 A	14 C	14 D
15 E	15 D	15 B
16 C	16 D	16 D
17 E	17 A	17 E
18 B	18 C	18 D
19 A	19 A	19 B
20 A	20 E	20 C
21 B	21 E	21 C
22 C	22 B	22 D
23 E	23 C	23 A
24 A	24 C	24 B
25 C	25 E	25 D
26 A	26 D	26 B
27 B	27 E	27 A
28 C	28 B	28 A
	29 E	
	30 C	