

Dr. Meilani Hartono, S.Si., M.Pd.
PGSD Bina Nusantara University



**Dr. Meilani Hartono, S.Si., M.Pd.
(MEL)**

- Head of Primary Teacher Education
Department Bina Nusantara University

Email : mhartono@binus.edu

HP : 082122055069

Number of Questions

Section	Number of Sections	Number of Questions
Analytical Writing	One	Two writing tasks
Verbal Reasoning	Two	Approximately 20 questions
Quantitative Reasoning	Two	Approximately 20 questions

TEST TIME LIMITS

The breakdown of time allotments for each section is as follows:

Section	Number of Sections	Number of Questions	Time Per Section
Analytical Writing	One	Two writing tasks	30 minutes for each writing task
Verbal Reasoning	Two	Approximately 20 questions	30 minutes per section
Quantitative Reasoning	Two	Approximately 20 questions	35 minutes per section

$$35'' = 2100''$$


$$2100'' : 20 \text{ item} = 105'' / \text{item} = 1'45'' / \text{item}$$

GENERAL TEST-TAKING STRATEGIES TO REMEMBER

Not all strategies will work for all questions. But there are some strategies that will work for most, if not all, questions:

- Anticipate and use the clock.
- Skip and return to questions.
- Eliminate answer choices that you know are incorrect.
- Use educated guessing.

The more you practice these and the strategies described for particular kinds of question formats described in this book, the easier the strategies will be to remember, to figure out which are appropriate to use with which questions, and to apply on test day.



INTERNATIONAL TEST-TAKERS: PAPER-AND-PENCIL VERSION

Test-takers outside the United States without access to a computer testing site will have a slightly different paper-and-pencil GRE test from the paper-and-pencil test given to test-takers in the United States. The test will not have an unidentified unscored or identified unscored research section. The test will be composed of the following sections, number of questions, and time per section:

Section	Number of Sections	Number of Questions	Time Per Section
Analytical Writing	One	Two writing tasks	30 minutes for each writing task
Verbal Reasoning	Two	25 questions	35 minutes per section
Quantitative Reasoning	Two	25 questions	40 minutes per section

You'll be given a calculator to use for the Quantitative Reasoning sections of the GRE.

The test will be given in October, November, and February, and scores will be reported six weeks after the test date.



- $40'' = 2400''$
- $2400'' : 25 \text{ item} = 96'' / \text{item} = 1'36'' / \text{item}$

INTERNATIONAL TEST-TAKERS: PAPER-AND-PENCIL VERSION

Test-takers outside the United States without access to a computer testing site will have a slightly different paper-and-pencil GRE test from the paper-and-pencil test given to test-takers in the United States. The test will not have an unidentified unscored or identified unscored research section. The test will be composed of the following sections, number of questions, and time per section:

Section	Number of Sections	Number of Questions	Time Per Section
Analytical Writing	One	Two writing tasks	30 minutes for each writing task
Verbal Reasoning	Two	25 questions	35 minutes per section
Quantitative Reasoning	Two	25 questions	40 minutes per section

You'll be given a calculator to use for the Quantitative Reasoning sections of the GRE.

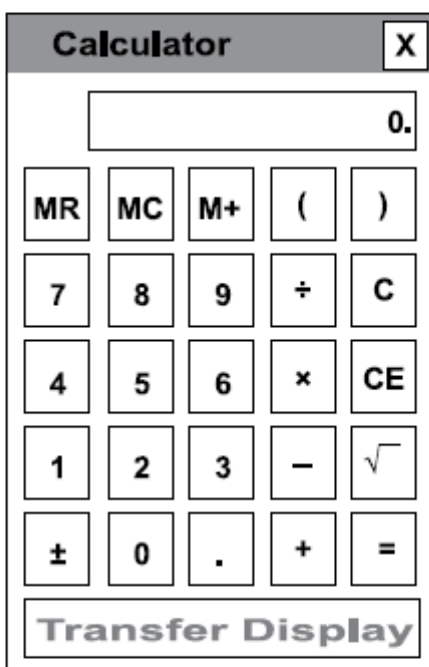
The test will be given in October, November, and February, and scores will be reported six weeks after the test date.

- $40'' = 2400''$
- $2400'' : 25 \text{ item} = 96'' / \text{item} = 1'36'' / \text{item}$

QUANTITATIVE REASONING

The Quantitative Reasoning sections of the test intersperse multiple-choice, quantitative comparison, and numeric entry questions. The multiple-choice questions will be in two formats: the traditional “select one answer choice” and the newer “select one or more answer choices.” The majority of questions will be the multiple-choice format, and the majority of those will be the traditional “select one answer choice.”

Those taking the computer version of the GRE will have an on-screen calculator to use. It will allow you to add, subtract, multiply, divide, and find square roots. It will look something like this:



Those taking the paper-and-pencil test outside the United States will be given a calculator at the test site. Don't bring your own because you won't be allowed to use it.

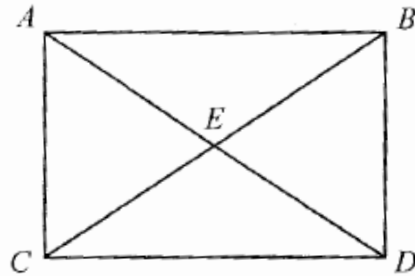
For Questions 1-8, compare Quantity A and Quantity B. Some questions will have additional information above the two quantities to use in determining your answer.

1.	<u>Quantity A</u>	<u>Quantity B</u>
	$6\frac{7}{8}$	3.42(2)

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

Questions 2–4 refer to the diagram below.

2.



$ABCD$ is a rectangle.

E is the intersection of AD and BC .

Quantity A

the area of $\triangle CED$

Quantity B

the area of $\triangle AEC$

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

3.

$$\begin{array}{c} \text{Quantity A} \\ m\angle ACD + m\angle CDB \end{array}$$

$$\begin{array}{c} \text{Quantity B} \\ m\angle AEC + m\angle CED \end{array}$$

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

4.

$$\begin{array}{c} \text{Quantity A} \\ (AB)^2 + (BD)^2 \end{array}$$

$$\begin{array}{c} \text{Quantity B} \\ AD \end{array}$$

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

5. $y < x < 0$

Quantity A

$$|x|$$

Quantity B

$$|y|$$

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

6. Assume a and b are two different integers.

Quantity A

$$(a + b)^2$$

Quantity B

$$(a + b)^3$$

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

7.



The area of the triangle is 15.

Quantity A

$$n$$

Quantity B

$$12$$

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

8.

$$x^2 = 9$$

Quantity A

x

Quantity B

-3

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

9. A grocery store is having a sale on cherries. Usually, the cost is \$6.99 per pound for cherries. This week, the price is 30% less. How much does a customer save if he purchases 2.5 pounds of cherries this week?

- A. \$2.10
- B. \$5.25
- C. \$4.89
- D. \$17.48
- E. \$4.20

10. A regular, six-sided die is rolled three times. What is the probability that each of the three rolls will produce an odd number?

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

B. $\frac{1}{3}$

C. $\frac{1}{6}$

D. $\frac{1}{8}$

E. $\frac{1}{216}$

For Question 11, indicate all the answers that apply.

11. Find the next 3 numbers in the sequence.

1, 1, 2, 3, 5, 8, ...

A. 12

B. 13

C. 14

D. 21

E. 22

F. 33

G. 34

H. 55

12. Let $f(x) = -3x^2(1 - x)$. Find $f(-2)$.

A. 108

B. 36

C. 12

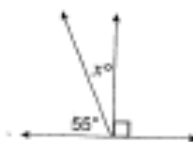
D. -12

E. -36

13. Solve for x : $-2(4x-2) + 3x = 1 - x$

- A. $\frac{3}{4}$
- B. $-\frac{3}{4}$
- C. $\frac{4}{3}$
- D. $-\frac{4}{3}$
- E. $-\frac{5}{6}$

14. Find the value of x .



- A. 55°
- B. 35°
- C. 90°
- D. 145°
- E. 125°

For Question 15, indicate all the answers that apply.

15. Which of the following are factors of 1,200?

- A. 8
- B. 14
- C. 15
- D. 75
- E. 85
- F. 160
- G. 250
- H. 300

Questions 16–18 are based on the following data.

Annual State Budgets (in millions of dollars)

	2011	2012	2013	2014	2015	2016, est
State A	53.0	75.9	85.5	101.6	131.2	142.1
State B	14.4	14.5	20.0	19.0	39.2	43.5

16. What is the ratio of the total (State A + State B) estimated budget of 2016 to 2011's budget?

SHOW YOUR WORK HERE

- A. 33.7 : 92.8
B. 142.1 : 53.0
C. 43.5 : 14.4
D. 14.4 : 43.5
E. 92.8 : 33.7
17. What is the total budget for State A for 2011, 2012, and 2015?
- A. 68.1
B. 260.1
C. 268
D. 276.4
E. 308.7
18. What year had the biggest percentage increase from the previous year in State B, and what was the percentage increase?
- A. 2013, 138%
B. 2015, 206%
C. 2014, 37%
D. 2015, 106%
E. 2016, 11%

For Question 19, enter your answer in the box.

19. Mary went to the convenience store with \$20. She wanted to buy a newspaper for \$1.25, a magazine for \$6.50, a soda for \$1.75, and then spend the rest of her \$20 on dime candy. How many pieces would she get?

20. If p is the greatest prime number that is a factor of 51, and q is the smallest prime number that is a factor of 58, then $p + q =$
- A. 5
 - B. 17
 - C. 19
 - D. 32
 - E. 46

For Questions 1–8, compare Quantity A and Quantity B. Some questions will have additional information above the two quantities to use in determining your answer.

1.	<u>Quantity A</u>	<u>Quantity B</u>
	0.324875	$\frac{10}{31}$

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

2.

Let $0 < x < 1$.

Quantity A
 x^2

Quantity B
 x^3

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

3.

Mary is twice as old as Stephen. Stephen is 5 years older than Joe. Joe is $\frac{1}{4}$ of Mary's age. All three were born in the twenty-first century.

Quantity A
Mary's birth year

Quantity B
Joe's birth year

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

4.

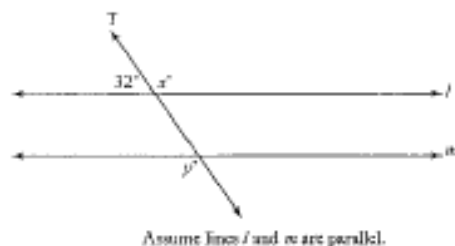
A try is worth 5 points. A conversion is worth 2 points.
A penalty goal is worth 3 points.

Quantity A
3 tries, 2 conversions, 1 penalty

Quantity B
24

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

5.

Quantity A x Quantity B y

- A. Quantity A is greater.
 B. Quantity B is greater.
 C. The two quantities are equal.
 D. The relationship cannot be determined from the information given.

6.

Quantity A $\frac{15}{16}$ Quantity B $\frac{16}{15}$

- A. Quantity A is greater.
 B. Quantity B is greater.
 C. The two quantities are equal.
 D. The relationship cannot be determined from the information given.

7.

There are 15 players on Team 1. There are 22 players on Team 2.
 There are more offensive players than defensive players on each team.

Quantity A

Number of goalies on Team 1

Quantity B

Number of goalies on Team 2

- A. Quantity A is greater.
 B. Quantity B is greater.
 C. The two quantities are equal.
 D. The relationship cannot be determined from the information given.

8.

$$\frac{y}{x} = 3$$

$$x, y \neq 0$$

Quantity A

x

Quantity B

y

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

9. Evaluate the function

$$f(x) = 5x^3 + 4x^2 + 8x + 1, \text{ when } x = 2.$$

- A. 73
- B. -11
- C. 183
- D. 117
- E. -73

10. If $2x - y = -1$ and $3x + 2y = 16$, what is x ?

A. 5

B. 2

C. $\frac{15}{7}$

D. $\frac{1}{2}$

E. $\frac{7}{15}$

11. If $\frac{3}{x-1} = \frac{6}{3x+6}$, then $x =$

A. -8

B. -1

C. 0

D. 1

E. 8

12. A new model hybrid car gets 45 miles per gallon for city driving and 20% more for highway driving. How many miles per gallon does the hybrid get for highway driving?

A. 34

B. 46

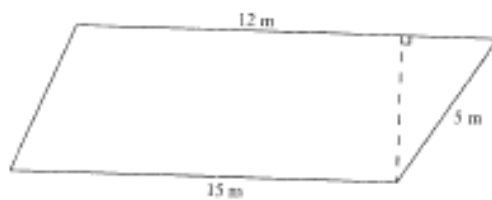
C. 51

D. 54

E. 58

For Question 13, enter your answer in the box.

13. Find the area of the parallelogram.



Questions 14–16 refer to the table below.

Number of Children per Family in a Neighborhood

Number of Children	Number of Families
1	19
2	36
3	21
4	9
0	15

14. What is the total number of families that have no more than two children?

SHOW YOUR WORK HERE

- A. 19
- B. 36
- C. 55
- D. 70
- E. 81

15. What is the percentage of families who have no children?

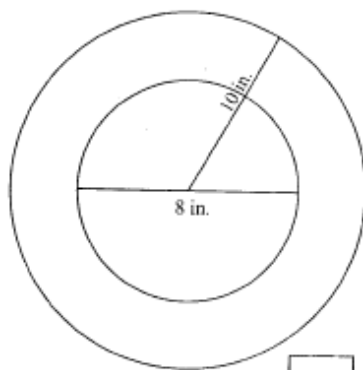
- A. 9%
- B. 12%
- C. 15%
- D. 18%
- E. 21%

16. What percentage of the families has 6 children?
- A. 19
 - B. 9
 - C. 15
 - D. 12
 - E. unknown
17. In the xy -plane, what is the slope of a line that is perpendicular to the line whose equation is $x + 2y = 5$?
- A. -2
 - B. $-\frac{1}{2}$
 - C. $\frac{1}{2}$
 - D. 2
 - E. 5
18. What is the x -coordinate of the point at which the graphs of the equations $x + 2y = 4$ and $y - x = 2$ intersect?
- A. -8
 - B. -2
 - C. 0
 - D. 2
 - E. 16

19. In triangle ABC , the length of side \overline{AB} is 4 cm and the length of side \overline{BC} is 8 cm. Which of the following could be the length of side \overline{AC} ?
- A. 2 cm
 - B. 4 cm
 - C. 6 cm
 - D. 8 cm
 - E. 10 cm
 - F. 12 cm

For Question 20, enter your answer in the boxes.

20. Suppose that the concentric circles below share the same center. What is the ratio of the circumference of the smaller circle to the larger one?



Give your answer as a fraction:

Thank
you
:)