



100%

series

EXCELLENCE IN

**QAT**

**General Aptitude Test**

ENGLISH VERSION

الامتياز في القدرات

**Mr. Ibrahim Kosheer**

**Scientific team of the book**

**Dr. Mohamed Refat**

**Mr. Hamdy Hassanein**

**Dr. Mustafa Hamza**



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# Bouquets

***Gain confidence, believe in yourself,  
and achieve success.***

“Education is not preparation for life; education is life itself”

“The function of education is to teach one to think intensively and to think critically. Intelligence plus character-that is the goal of true education”

“Knowledge will bring you the opportunity to make a difference”

“The roots of education are bitter, but the fruit is sweet”

“The only source of knowledge is experience”

“Things work out best for those who make the best of how things work out”

“To live a creative life, we must lose our fear of being wrong”

“A smooth sea never made a skilled sailor”

“All our dreams can come true if we have the courage to pursue them”

“Good things come to people who wait, but better things come to those who go out and get them”

“Opportunities don't happen, you create them”

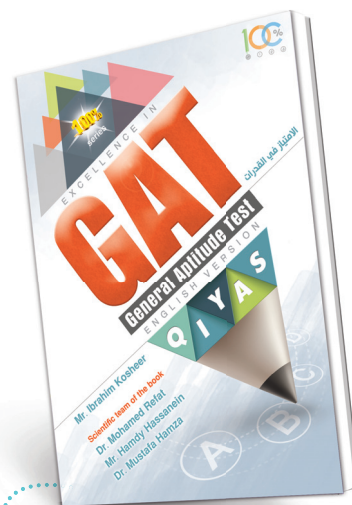
# What is the GAT?

The GAT is an acronym for General Aptitude Test. The General Aptitude Test (GAT) (Qudrat) has been in use for several years as one of the major tools in selecting students who will be admitted to universities and colleges throughout the Kingdom of Saudi Arabia.



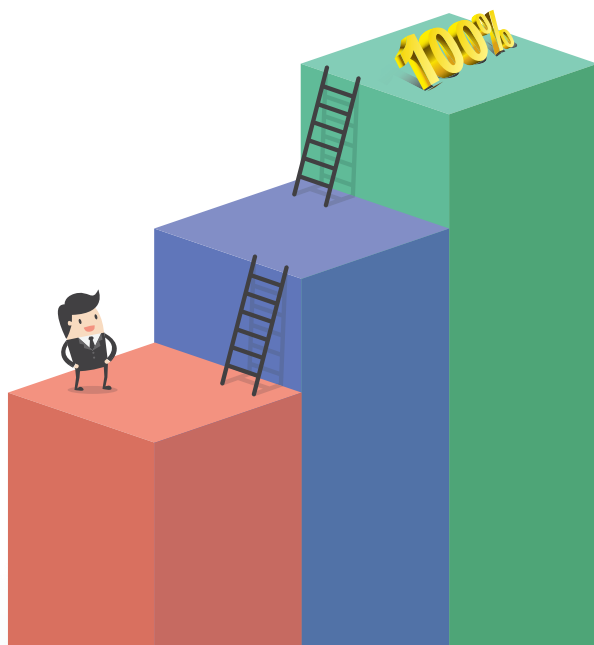
## What does this book aim at?

This book has been created to guide students and direct them towards a complete understanding of the most effective methods of getting prepared for taking the General Aptitude Test (GAT). Throughout a variety of examples, along with detailed explanation and model tests, this book allows students to have further practice and enables them to assess their own ability to pass the GAT with a high score. In addition, an answer key is included in the book after each model test.



## Raise your score

*in the GAT throughout Real Practice Tests:*

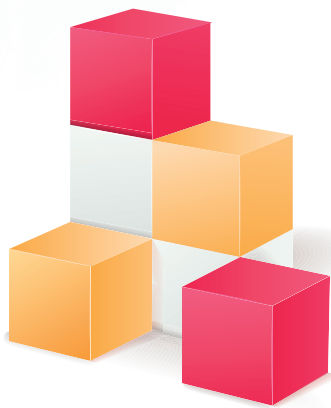


This book provides students with a variety of practice tests which are designed to enable test-takers to deal with all types of questions they are likely to encounter when they take the General Aptitude Test (GAT).

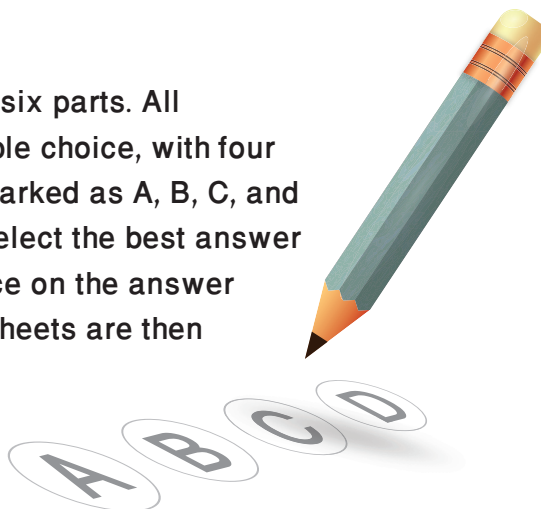
All questions are designed to meet the student's needs and efficiently help them to develop strong understanding of how to answer each type of questions correctly.



## What does the GAT consist of?



The test consists of six parts. All questions are multiple choice, with four possible answers marked as A, B, C, and D. The test-takers select the best answer and mark their choice on the answer sheet. The answer sheets are then machine scored.



## How is the test scored?

The test-takers' scores are calculated only on the

# 120

questions of the actual GAT test

## 68

questions  
are verbal

## 52

questions  
are quantitative

The overall duration of the test is 3 hours.

# 03:00

To enhance security there are 5 forms of each test.



### Important notice:

If needed, a student is allowed to use the question booklet as a draft to try the answers.

# What are the GAT sections?

## A Verbal Section

This is the language section, and it has three content areas:

1



### Sentence Completion

The test-takers are given a short sentence or sentences with one or two blanks for missing words; from the four choices given, the test-takers must choose the word or words that best fit in the blank or blanks.

2



### Analogy

A pair of words conveying a specific relationship is given and the test-takers are asked to choose the pair of words from the four choices that is closest to the relationship of the original pair.

3



### Reading Comprehension

The test-takers are given passages and they are required to answer questions that relate to the passages.

## B Quantitative Section

1



### Arithmetic questions

2



### Algebraic questions

3



### Geometry questions

4



### Statistic and analytical questions



This mathematical section emphasizes problem-solving, logical reasoning, analysis, and induction.

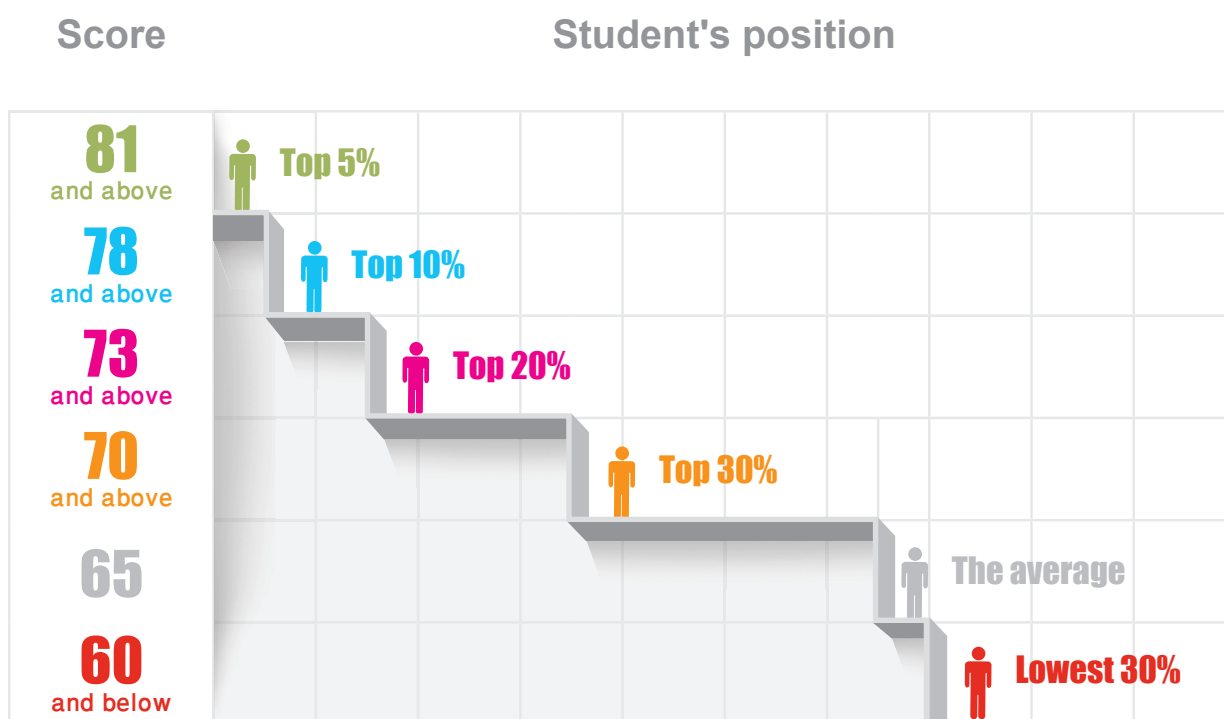


The mathematical questions include simple numbers, so it is not allowed for test-takers to obtain a calculator while taking the test.

# Is the GAT a **Pass or Fail** test?

The GAT is no Pass-Fail test. The recorded score that the student receives represents the relevant position that the student occupies among the total number of students taking the test.

This 100-point test carries a certain relative weight interpreted by the institution the student applies for. GAT score should not be compared to that of General Secondary School score. What really matters is the relevant position of the student compared to those of other students, according to the following infographic:



## Important notice:

In the actual test, your scores for the multiple-choice sections will be determined by the number of questions you answer correctly. Nothing is subtracted from a score if you answer a question incorrectly. Therefore, to maximize your scores it is better for you to guess at an answer than not to respond at all. Work as rapidly as you can without losing accuracy. Do not spend too much time on questions that are too difficult for you. Go on to the other questions and come back to the difficult ones later.

# Marking Your Answers:



Be sure that each mark is dark and completely fills the circle.



Any stray marks that lie in or near a circle must be erased carefully.



You may work out your answers in the blank areas of the test book, but do not work out answers near the circles.

	A	B	C	D
1	(A)	(B)	(C)	(D)
2	(A)	(B)	(C)	(D)
3	(A)	(B)	(C)	(D)
4	(A)	(B)	(C)	(D)
5	(A)	(B)	(C)	(D)
6	(A)	(B)	(C)	(D)
7	(A)	(B)	(C)	(D)
8	(A)	(B)	(C)	(D)
9	(A)	(B)	(C)	(D)
10	(A)	(B)	(C)	(D)



If you change an answer, be sure that all previous marks are erased completely. Stray marks and incomplete erasures may be read as intended answers.



# Math section



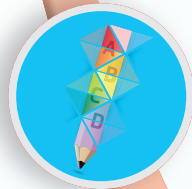
Rules



Strategies



Tests



## Basic Rules of Algebra

- 1  $a(b + c) = ab + ac$
- 2  $a \cdot \frac{1}{a} = 1$
- 3 If  $a = b$  then  $ac = bc$
- 4 If  $a + c = b + c$  then  $a = b$
- 5  $\frac{a}{b} \pm \frac{c}{b} = \frac{a \pm c}{b} \quad b \neq 0$
- 6  $\frac{a}{b} \pm \frac{c}{d} = \frac{ad \pm bc}{bd} \quad d, b \neq 0$
- 7  $\frac{a}{b} \div \frac{c}{d} = \frac{a}{b} \cdot \frac{d}{c} = \frac{ad}{bc} \quad C, d, b \neq 0$
- 8  $(x - a)(x - b) = x^2 - (a + b)x + ab$
- 9  $(a \pm b)^2 = a^2 \pm 2ab + b^2$
- 10  $(a + b)(a - b) = a^2 - b^2$
- 11 If  $a < b$  then  $-a > -b$

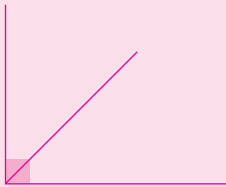
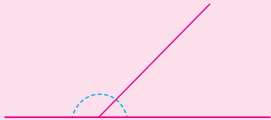
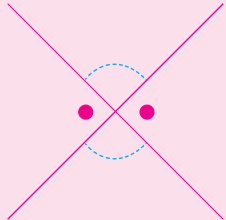
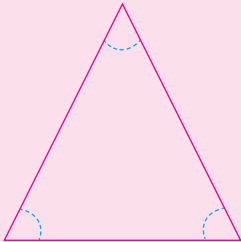
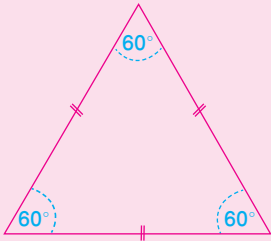
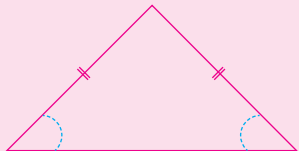
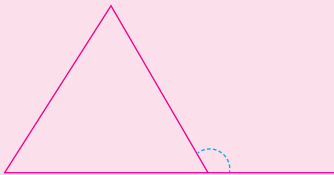
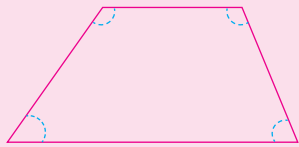
## Rules for exponents

- 1 Zero - Exponent Rule:  $a^0 = 1 \quad a \neq 0$
- 2 Power Rule:  $(a^m)^n = a^{mn}$
- 3 Negative Exponent Rule:  $a^{-n} = \frac{1}{a^n} \quad a \neq 0$
- 4 Product Rule:  $a^m \cdot a^n = a^{m+n}$
- 5 Quotient Rule:  $\frac{a^m}{a^n} = a^{m-n} \quad a \neq 0$

## Rules for square Roots

- 1  $(\sqrt{a})^2 = a \quad \sqrt{a^2} = |a|$
- 2 If  $a^2 = b$  then  $a = \pm \sqrt{b}$
- 3  $\sqrt{a} \sqrt{b} = \sqrt{ab}$
- 4  $\sqrt{ab} = \sqrt{a} \sqrt{b}$
- 5  $\sqrt[n]{a} = b$  means  $a = b^n$
- 6  $a^{\frac{m}{n}} = (\sqrt[n]{a})^m = \sqrt[n]{a^m}$

# Angle Rules

Name	Rule	Diagram
Complementary angles	Add to 90 degrees	
Supplementary angles	Add to 180° degrees	
Vertically opposite angles	Equal	
Angle sum of a triangle	Add to 180° degrees	
Equilateral triangle	Every angle = 60°	
Isosceles triangle	Base angles are equal	
Exterior angle of a triangle	The exterior angle equals the sum of the two interior opposite angles.	
Angle sum of a quadrilateral	Add to 360° degrees	

1

## Replacing variables by numbers

It is better to replace algebraic terms as A, X, Y, N, .... by numbers, to make it easy to get a solution as shown in the following examples:

### Example 1

If  $\frac{x}{y} = 5$ , then  $\frac{x + 3y}{y} = \dots\dots\dots$

- (A) 10      (B) 8      (C) 5      (D) 3

### Solution

Let  $x = 5$ ,  $y = 1$

Then  $\frac{x + 3y}{y} = \frac{5 + 3(1)}{1} = 8 \dots\dots\dots \rightarrow$  (B)

### Example 2

If  $xy > 0$ , then compare:

value of A	value of B
$(x + y)^2$	$x^2 + y^2$

- (A) Value of A is greater      (B) Value of B is greater  
(C) The two values are equal      (D) The given information is not sufficient

### Solution

Let  $y = 2$ ,  $x = 1$

$$A = (1 + 2)^2 = 3^2 = 9,$$

$$B = 1^2 + 2^2 = 1 + 4 = 5 \dots\dots\dots \rightarrow$$
 (A)

### Example 3

How many times the surface area of the square will double, if we double the length of it?

- (A) twice      (B) 3 times      (C) 4 times      (D) 8 times

### Solution

Let the side length = 3 cm

then the area of the small square =  $3 \times 3 = 9 \text{ cm}^2$

and the area of the large square =  $6 \times 6 = 36 \text{ cm}^2 \dots\dots\dots \rightarrow$  (C)



Model (1) answer sheet

Questions	Answers			
1	(A)	(B)	(C)	(D)
2	(A)	(B)	(C)	(D)
3	(A)	(B)	(C)	(D)
4	(A)	(B)	(C)	(D)
5	(A)	(B)	(C)	(D)
6	(A)	(B)	(C)	(D)
7	(A)	(B)	(C)	(D)
8	(A)	(B)	(C)	(D)
9	(A)	(B)	(C)	(D)
10	(A)	(B)	(C)	(D)
11	(A)	(B)	(C)	(D)
12	(A)	(B)	(C)	(D)
13	(A)	(B)	(C)	(D)
14	(A)	(B)	(C)	(D)
15	(A)	(B)	(C)	(D)
16	(A)	(B)	(C)	(D)
17	(A)	(B)	(C)	(D)
18	(A)	(B)	(C)	(D)
19	(A)	(B)	(C)	(D)
20	(A)	(B)	(C)	(D)
21	(A)	(B)	(C)	(D)
22	(A)	(B)	(C)	(D)
23	(A)	(B)	(C)	(D)
24	(A)	(B)	(C)	(D)
25	(A)	(B)	(C)	(D)
26	(A)	(B)	(C)	(D)

# Model (1)

1



26



26:00

1  $3^{10} + 3^{10} + 3^{10} = \dots\dots\dots$

(A)  $9^{30}$

(B)  $3^{30}$

(C)  $9^{10}$

(D)  $3^{11}$

2 Compare:

value of A

$81 \times 8 \times 7$

value of B

$27 \times 14 \times 12$

(A) Value of A is greater

(B) Value of B is greater

(C) The two values are equal

(D) The given information is not sufficient

3 The value of:  $120 - 64 \div 8 \times 4$  is .....

(A) 108

(B) 118

(C) 88

(D) 96

4  $1 + 2 + 3 + 4 + \dots\dots\dots + 100 = \dots\dots\dots$

(A) 10000

(B) 20100

(C) 5500

(D) 5050

5 If  $\frac{x}{y} = 7$  then  $\frac{x + 3y}{2y} = \dots\dots\dots$

(A) 5

(B)  $\frac{3}{7}$

(C) 10

(D) 21

6 How many even integer numbers are between  $\frac{12}{5}, \frac{56}{5}$  ?

(A) 44

(B) 22

(C) 4

(D) 10

7 The measure of the exterior angle of an equilateral triangle equals .....

(A)  $180^\circ$

(B)  $120^\circ$

(C)  $90^\circ$

(D)  $60^\circ$

8 If sixth of a number equals 25% of the number 12, then what is the number?

(A) 12

(B) 16

(C) 24

(D) 18

23 Compare:

value of A
40% of 60

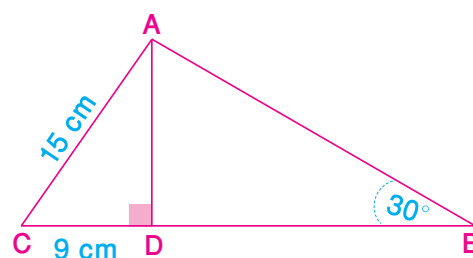
value of B
30% of 80

- (A) Value of A is greater (B) Value of B is greater  
(C) The two values are equal (D) The given information is not sufficient

24 If  $x + 2y = 3$ ,  $x^2 - 4y^2 = 21$ , then  $x - 2y = \dots\dots\dots$

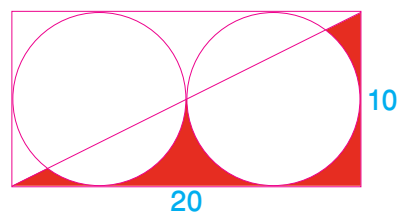
- (A) 6 (B) 7 (C) 9 (D) 14

25 In the opposite figure the perimeter of  $\triangle ABC$  is:

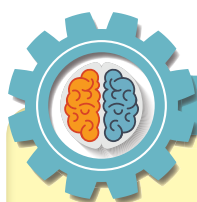


- (A)  $48 + 12\sqrt{2}$  cm (B) 48 cm (C)  $48 + 12\sqrt{3}$  cm (D) 72 cm

26 Find the total area of the red spots.



- (A)  $100\pi$  (B) 314 (C) 100 (D)  $100 - 25\pi$



## My skills

### Simplifying the roots

To simplify the roots divide the number into two numbers one of them has a root.

Ex:

$$\sqrt{20} = \sqrt{4 \times 5} = 2\sqrt{5}$$

$$\sqrt{27} = \sqrt{9 \times 3} = 3\sqrt{3}$$

$$\sqrt{50} = \sqrt{25 \times 2} = 5\sqrt{2}$$

$$\sqrt[3]{16} = \sqrt[3]{8 \times 2} = 2\sqrt[3]{2}$$

Complete:

$$\sqrt{12} = \sqrt{\dots \times \dots} = 2\sqrt{\dots}$$

$$\sqrt{200} = \sqrt{\dots \times \dots} = 10\sqrt{\dots}$$

$$\sqrt{18} = \sqrt{\dots \times \dots} = 3\sqrt{\dots}$$

$$\sqrt[3]{250} = \sqrt[3]{\dots \times \dots} = 5\sqrt[3]{\dots}$$

## Model (1) answers

Questions	Answers			
1	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
2	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
3	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
4	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
5	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
6	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
7	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
8	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
9	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
10	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
11	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
12	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
13	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
14	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
15	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
16	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
17	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
18	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
19	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
20	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
21	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
22	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
23	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
24	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
25	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
26	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D



# Model (3)

3



25



25:00

1 If  $x + \frac{1}{x} = 2$ , then  $x^2 + \frac{1}{x^2} = \dots\dots\dots$

(A) 4

(B) 2

(C) 8

(D) 6

2 Compare:

value of A
$3x^{\text{zero}} \quad (x \neq 0)$

value of B
$(5x)^{\text{zero}} \quad (x \neq 0)$

(A) Value of A is greater

(B) Value of B is greater

(C) The two values are equal

(D) The given information is not sufficient

3 The value of  $\frac{2^{100} - 2^{98}}{2^{99} - 2^{98}} = \dots\dots\dots$

(A)  $2^3$

(B) 4

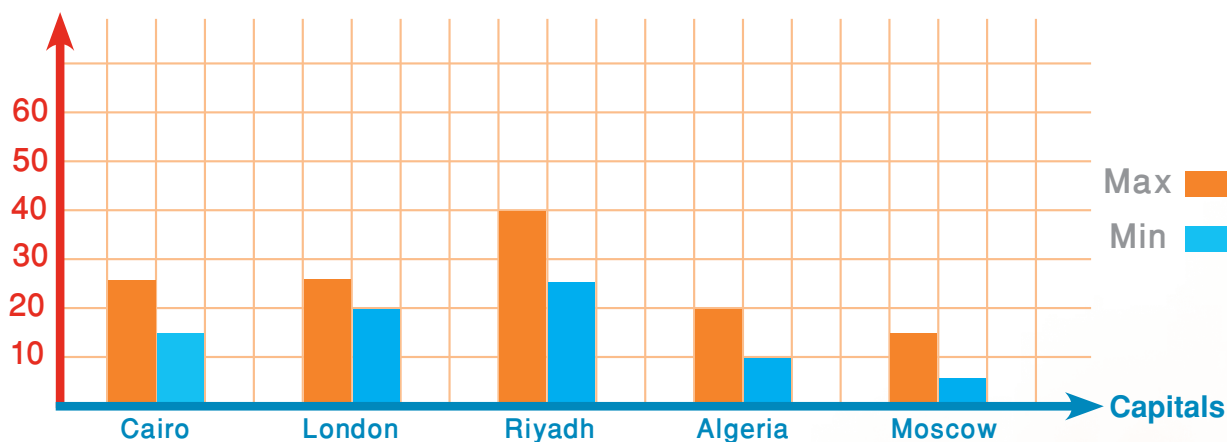
(C) 3

(D) 2

Questions (4 - 6) are related to the following graph:

The maximum and minimum temperatures  
in April of some Arab and world capitals:

Temperatures



4 The greatest temperature is in .....

(A) Cairo

(B) London

(C) Riyadh

(D) Algeria

1

$$\therefore \left(x + \frac{1}{x}\right)^2 = (2)^2$$

$$\therefore x^2 + 2 \cdot x \cdot \frac{1}{x} + \frac{1}{x^2} = 4$$

$$\therefore x^2 + 2 + \frac{1}{x^2} = 4$$

$$x^2 + \frac{1}{x^2} = 4 - 2 = 2$$

So The correct answer is

(B)

2

$$\therefore A = 3x^{\text{zero}} = 3(1) = 3$$

$$, B = (5x)^{\text{zero}} = 1$$

So  $A > B$

(A)

3

$$\frac{2^{100} - 2^{98}}{2^{99} - 2^{98}} = \frac{2^{98} \cdot 2^2 - 2^{98}}{2^{98} \cdot 2 - 2^{98}}$$

(by taking  $2^{98}$  as a common)

$$= \frac{2^{98}(2^2 - 1)}{2^{98}(2 - 1)} = \frac{(4 - 1)}{1} = \frac{3}{1} = 3$$

(C)

4

The greatest max. temp.

in Riyadh is  $40^\circ\text{C}$

(C)

5

The difference:

$$40^\circ\text{C} - 15^\circ\text{C} = 25^\circ\text{C}$$

(D)

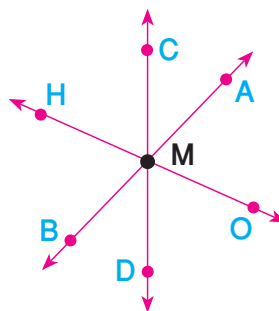
6

$$\text{The mean} = \frac{25^\circ\text{C} + 15^\circ\text{C}}{2}$$

$$= \frac{40^\circ\text{C}}{2} = 20^\circ\text{C}$$

(B)

7



$$m(\angle AMO) = m(\angle BMH) = \frac{140^\circ}{2} = 70^\circ$$

$$\text{If } m(\angle AMC) = 2x, m(\angle DMO) = 3x,$$

$$\text{then } 2x + 3x + 70^\circ = 180^\circ \text{ and } 5x + 70^\circ = 180^\circ,$$

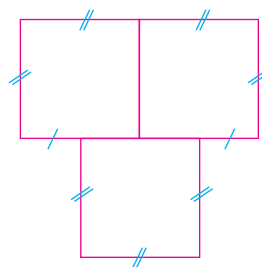
$$5x = 110^\circ \text{ Then } x = 22^\circ$$

$$\text{So } m(\angle CMH) = m(\angle DMO)$$

$$= 3x = 3(22^\circ) = 66^\circ$$

(C)

8



The perimeter of the figure

= sum of exterior edges only

$$= \text{edge length} \times 8$$

$$= 2 \times 8 = 16 \text{ cm}$$

$$\text{Area of one square} = 12 \div 3 = 4\text{cm}^2$$

$$\text{edge length} = \sqrt{4} = 2\text{cm}$$

(D)

16  $(301 + 302 + 303 + \dots + 325) - (1 + 2 + 3 + \dots + 25) = \dots\dots\dots$

(A) 300

(B) 325

(C) 3250

(D) 7500

17 Compare:

value of A
$\frac{1}{1 - \frac{1}{2}}$

value of B
$\frac{3}{8}$

(A) Value of A is greater

(B) Value of B is greater

(C) The two values are equal

(D) The given information is not sufficient

18 If a mosque has 3 doors. How many ways can Nayef enter from these doors and exit from a different door?

(A) 27

(B) 9

(C) 6

(D) 5

19 The Pin number of a phone is formed from four numbers from (0 to 9). How many ways can it be formed?  
(numbers can be repeated)



(A) 10000

(B) 6500

(C) 5040

(D) 4000

20 If the mean of the numbers (12, 18, y, 16) is 15. Find the value of y?

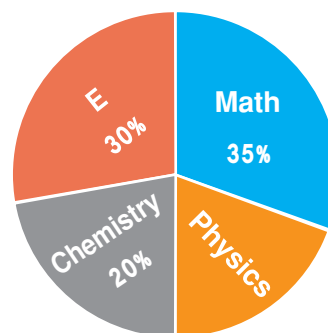
(A) 10

(B) 12

(C) 14

(D) 17

21 If the opposite figure represents the school results, If the number of the school students is 300 students. How many superior students in physics?



(A) 45

(B) 50

(C) 55

(D) 60

1

Exclude (A) and (D) digits not similar  
(The same)  
Exclude (B) not divisible by 4 and 8  
then the answer is

(C)

2

$$\therefore Cx^2 + 10x + 1 = (5x + 1)^2$$

$$= 25x^2 + 10x + 1,$$

So C = 25

(A)

3

First : second : Third

$$\begin{array}{ccc} 3 & : & 5 & : \\ & \searrow & \nearrow & \searrow \\ & 2 & & 1 \end{array}$$


---


$$6 : 10 : 5$$

Sum = 21

$$\text{share of the first} = \frac{6}{21} \times 21000$$

6000 S.R

(B)

4

$$\text{Since } (32)^{x-3} = (8)^{2x+1}$$

$$\text{then } (2^5)^{x-3} = (2^3)^{2x+1}$$

$$\text{and } 2^{5x-15} = 2^{6x+3}$$

$$\text{So } 5x - 15 = 6x + 3$$

$$6x - 5x = -15 - 3$$

$$x = -18$$

$$\text{Then } x - 3 = -21$$

(B)

5

$$\therefore \sqrt{25}x = 5x \text{ (value of A)}$$

$$, 9x \text{ (value of B)}$$

If x is positive (value of B > value of A)

If x is negative (value of A > value of B)

So the information is not sufficient

(D)

6

The average score he wants for the four tests is 90

$$\text{So the total score} = 90 \times 4 = 360$$

$\therefore$  The total of his previous score =

$$80 + 90 + 95 = 265$$

$\therefore$  The score of the Fourth test =

$$360 - 265 = 95$$

(D)

7

Let edge length = x

$$\therefore x^3 = 2\sqrt{2} = (\sqrt{2})^3$$

$$x = \sqrt{2}$$

(A)

8

The least saved money was in Feb. = 120

(B)

9

The difference = 240 - 120

$$= 120$$

(D)



21

Through  $\frac{1}{2}$  hour Moh. covers 1 km.

and the car 10 k.m.

then the distance =  $1 + 10 = 11$  K.m.

Because the car and Moh. are moving in opposite directions.

*Another solution*

∴ They are moving in opposite directions

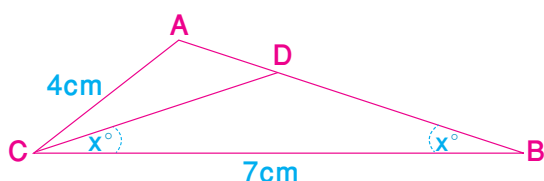
$$\begin{aligned}\therefore \text{The speed (S)} &= S_1 + S_2 \\ &= 2 + 20 \\ &= 22 \text{ km/h}\end{aligned}$$

∴ The distance = speed  $\times$  time

$$\begin{aligned}&= 22 \times \frac{1}{2} \\ &= 11 \text{ k.m}\end{aligned}$$

(A)

22



Perimeter of ADC = 12

$$\therefore |AD| + |DC| + 4 = 12$$

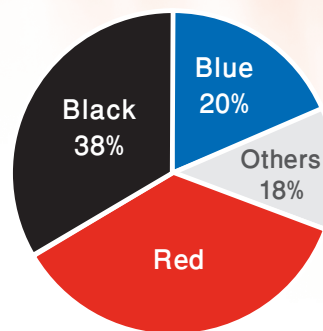
$$|AD| + |DC| = 8$$

$$|AD| + |DB| = |AB| = 8$$

$$\therefore \text{Perimeter of ABC} = 8 + 4 + 7 = 19 \text{ cm}$$

(B)

23



∴ The red sector represents

$\frac{1}{4}$  of the circle

$$\therefore \frac{1}{4} \text{ of } 510 \simeq 125$$

(A)

24

Longest side = 12,

and  $(12 - 9) = 3$

The middle side = 9

we suppose the shortest side (x)

$$12 - 9 < x < 12 + 9$$

$$3 < x < 21$$

The shortest side length = 4

(B)

25

$$x^2 = 1$$

$$x = \pm \sqrt{1} = \pm 1$$

$$\text{Sum of the roots} = 1 + (-1) = 0$$

(C)

23

$$360^\circ - (90^\circ + 44^\circ + 70^\circ + 36^\circ)$$

$$= 360^\circ - 240^\circ = 120^\circ$$

$$\therefore \frac{120}{360} = \frac{1}{3} = \frac{1}{3}$$

$\therefore$  the cost of the residence

$$= \frac{1}{3} \text{ of the income}$$

$$= \frac{1}{3} (12000)$$

$$= \frac{12000}{3} = 4000$$

(A)

24

$$4 = 2 \times 2, \quad 15 = 3 \times 5$$

All numbers divisible by 4 and 15

divisible by (6, 10, 30, 12, 60)

(any mix of the factors)

(A)

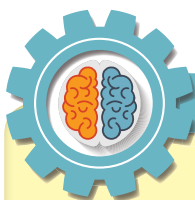
25

$$r = \frac{60}{2} = 30,$$

The perimeter of the wheel =  $2\pi(30) = 60\pi$

The distance =  $15 \times 60\pi = 900\pi \text{ cm}$

(A)



## My skills

## Percentage

- It is every fraction with denominator 100

Ex:

$$\frac{17}{100} = 17\%$$

$$\frac{3}{5} = \frac{3 \times 20}{5 \times 20} = \frac{60}{100} = 60\%$$

- To find percentage of any quantity

=

$$\frac{\text{any part}}{\text{all}} \times 100\%$$

- The smart key to find any percentage is the value of 10%

Ex:

20% of 4500

$$\therefore 10\% \text{ of } 4500 = 450$$

$$\therefore 20\% = 450 + 450 = 900$$

- Another method (the table method)

Ex:

12% out of 500 as a discount

before discount	discount	after discount
100	12	88
500		X

# Verbal section



Sentence  
Completion



Analogy



Reading  
Comprehension



Tests



# Analogy

## in General Aptitude test (GAT)

### What is Analogy?

In verbal analogies, the test taker is given one pair of related words and other pairs of words. The test taker must find the pair of words that has the same relationship to the words in the first pair. For example: (fire:hot), have the same relation as (ice:cold).

Pairs of words in verbal analogies can be related in many ways, including the following types:

Type of Analogy	Examples
Things that go together	bat/ball, bow/arrow, salt/pepper, bread/butter, fork/knife
Opposites	big/small, stop/go, hot/cold, tall/short, wide/narrow, early/late, graceful/clumsy, laugh/cry, dark/light, sharp/dull
Synonyms	big/large, stop/halt, cold/icy, thin/slim, small/tiny, sad/unhappy, show/reveal, hide/conceal, hint/clue
Object and classification	green/color, ants/insect, rabbit/mammal, table/furniture, pants/clothing, 3/odd number, apple/fruit, lunch/meal, uncle/relative, sandal/shoe, spring/season
Object and group	whale/pod, kitten/litter, bird/flock, cow/herd, lion/pride, wolf/pack
Object and related object	plant/sprout, butterfly/caterpillar, cat/kitten, mother/baby, dog/puppy
Object and a characteristic	grass/green, sponge/porous, marshmallow/soft, elephant/big, desert/dry, gold/shiny, party/happy, skunk/smelly, ball/round
Object and location	car/garage, stove/kitchen, tub/bathroom, fire/fireplace, lion/zoo, eraser/pencil
Object and part of the whole	hand/fingers, book/pages, foot/toes, fireplace/bricks, year/month, turtle/shell
Object and function	pen/write, knife/cut, shovel/dig, book/read
Performer and action	teacher/teach, movie star/act, artist/paint, fish/swim, bird/fly

## Answer Key with explanations:

Look at the answer key below and see how the relations between the pair of words are indicated:

1

A binding surrounds a book; a frame surrounds a picture

(D)

2

One explores to discover; one researches to learn

(B)

3

Siamese is a kind of cat; romaine is a kind of lettuce

(D)

4

A finch is a type of bird; a Dalmatian is a type of dog.

(C)

5

A petal is a part of a flower; a tire is a part of a bicycle

(B)

6

Upon harvesting, cotton is gathered into bales; grain is gathered into shocks.

(C)

7

An elephant is a pachyderm; a kangaroo is a marsupial

(C)

8

A psychologist treats a neurosis; an ophthalmologist treats a cataract

(A)

9

Pastoral describes rural areas; metropolitan describes urban areas

(A)

10

To tailor a suit is to alter it; to edit a manuscript is to alter it

(B)

11

An elbow is a part of an arm; a Knee is a part of a leg.

(C)

12

A car moves on a road; a train moves on a track.

(A)



25 JAUNDICE : LIVER

- |                 |                       |
|-----------------|-----------------------|
| (A) rash : skin | (B) dialysis : kidney |
| (C) smog : lung | (D) limb : heart      |

26 FALLING : GRAVITATION

- |                        |                            |
|------------------------|----------------------------|
| (A) balloon : sky      | (B) collapse : destruction |
| (C) electricity : lamp | (D) pressure : air         |

27 GRAINS : SAND

- |                   |                  |
|-------------------|------------------|
| (A) surf : wave   | (B) droos : rain |
| (C) flood : water | (D) snow : ice   |

28 VIOLENCE : ACTIVITY

- |                       |                     |
|-----------------------|---------------------|
| (A) evening : morning | (B) cruelty : evil  |
| (C) melancholy : mood | (D) silence : noise |

29 BIRDS : AVIARY

- |                      |                      |
|----------------------|----------------------|
| (A) trees : branches | (B) flowers : buds   |
| (C) bees : apiary    | (D) animals : beasts |

30 MERCURY : PLANET

- |                   |                      |
|-------------------|----------------------|
| (A) Earth : globe | (B) Moon : satellite |
| (C) Star : light  | (D) Sun : heat       |

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

# Model (1)

1



25



25:00



## Sentence Completion

Choose the best answer to complete the following sentences

- 1 The haunted house was so ..... and scary, it made me question my own .....  

(A) disorienting...reality	(B) interesting...friends
(C) confusing...family	(D) hilarious...motives
- 2 Mr. Smith was ..... about his first diving competition. And, apparently this enthusiasm was ..... others began to feel the same way he did.  

(A) nervous...popular	(B) excited...contagious
(C) withdrawn...high	(D) agitated...underestimated
- 3 The ..... started today for a lost hiker in the state park. I hope they are able to ..... him!  

(A) search...rescue	(B) hunt...locate	(C) party...celebrate	(D) funeral...find
---------------------	-------------------	-----------------------	--------------------
- 4 The warring tribes were weary of conflict, so both were eager to forge a peaceful .....  

(A) negotiation	(B) victory	(C) insurgency	(D) resolution
-----------------	-------------	----------------	----------------
- 5 Most companies have ..... procedures in place to check the quality of their products. If they ..... these procedures, their products are more likely to fail.  

(A) strict...follow	(B) stringent...neglect
(C) written...omit	(D) clear...forget
- 6 Newspaper reporters frequently ..... the presidential election.  

(A) cover	(B) challenge	(C) understand	(D) discover
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## Model (1) answers

Questions	Answers			
1	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
2	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
3	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
4	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
5	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
6	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
7	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
8	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
9	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
10	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
11	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
12	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
13	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
14	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
15	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
16	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
17	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
18	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
19	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
20	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
21	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
22	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
23	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
24	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
25	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D



## Analogy

Complete each analogy by choosing the words whose relationship are similar to the given ones:

### 10 RETICENT : TALK

- |                         |                       |
|-------------------------|-----------------------|
| (A) abstemious : devour | (B) tasteless : savor |
| (C) likely : conjecture | (D) cranky: grumble   |

### 11 MILK : EXTRACT

- |                     |                      |                      |                    |
|---------------------|----------------------|----------------------|--------------------|
| (A) expend : relish | (B) exploit: utilize | (C) explore : peruse | (D) rent: contrive |
|---------------------|----------------------|----------------------|--------------------|

### 12 SLICE : CAKE

- |                    |                 |                  |                   |
|--------------------|-----------------|------------------|-------------------|
| (A) carve : turkey | (B) peel: peach | (C) mash : onion | (D) core : orange |
|--------------------|-----------------|------------------|-------------------|

### 13 REFLECTION: LIGHT

- |                   |                  |                        |                  |
|-------------------|------------------|------------------------|------------------|
| (A) movie : scene | (B) echo : sound | (C) sentiment: feeling | (D) iris : sight |
|-------------------|------------------|------------------------|------------------|

### 14 MONEY : POOR

- |                         |                     |
|-------------------------|---------------------|
| (A) refinement: sincere | (B) tact: offensive |
| (C) speech : unlettered | (D) liquor: sober   |

### 15 CORRESPOND : LETTERS

- |                               |                           |
|-------------------------------|---------------------------|
| (A) arbitrate : controversies | (B) trespass : boundaries |
| (C) debate : problems         | (D) barter: commodities   |

### 16 REMORSELES : PITY

- |                        |                          |
|------------------------|--------------------------|
| (A) nefarious : virtue | (B) guileless : youth    |
| (C) charitable : money | (D) despondent: sympathy |

### 17 EXTOL: PRAISE

- |                        |                     |                         |                         |
|------------------------|---------------------|-------------------------|-------------------------|
| (A) regale : entertain | (B) instruct: learn | (C) embellish : refresh | (D) fascinate : repulse |
|------------------------|---------------------|-------------------------|-------------------------|

### 18 IMPERTURBABLE : COMPOSURE

- |                              |                          |
|------------------------------|--------------------------|
| (A) circumspect: impetuosity | (B) chary : caution      |
| (C) meticulous : ingenuity   | (D) exigent: equilibrium |

## 16 PEDANTIC : LEARNED

- (A) simplistic : guileless (B) moralistic : principled  
(C) positivistic : experimental (D) biased : prejudiced

## 17 VAPORIZED : HEAT

- (A) diffused : gas (B) hardened : pressure  
(C) purified : distillate (D) abraded : friction

## 18 TRIM : HAIR

- (A) harvest : corn (B) prune : hedge (C) clip : bouquet (D) pluck : flower

## 19 CRINGE : DREAD

- (A) fidget : nervousness (B) obstruct : disappointment  
(C) entertain : amusement (D) suspect : anxiety



## Reading

Read the following passage, then choose the best answer to each of the questions that follow:

## Robots

1. A robot is a machine. But it is not just any machine. It is a special kind of machine. It is a machine that moves. It follows instructions. The instructions come from a computer. Because it is a machine, it does not make mistakes. And it does not get tired. And it never complains. Unless you tell it to!
2. Robots are all around us. Some robots are used to make things. For example, robots can help make cars. Some robots are used to explore dangerous places. For example, robots can help explore volcanoes. Some robots are used to clean things. These robots can help vacuum your house. Some robots can even recognize words. They can be used to help answer telephone calls. Some robots look like humans. But most robots do not. Most robots just look like machines.
3. Long ago, people imagined robots. Over 2,000 years ago, a famous poet imagined robots. The poet's name was Homer. His robots were made of gold. They cleaned things and they made things. But they were not real. They were imaginary. Nobody