

GHANA LIVING STANDARDS SURVEY  
EDUCATION MODULE

Mathematics Questions

1. 
$$\begin{array}{r} 105 \\ -16 \\ \hline \end{array}$$

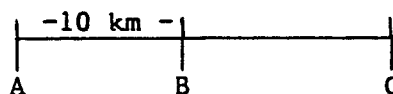
- (A) 89
- (B) 91
- (C) 99
- (D) 111

2.  $4 \overline{)2836}$

- (A) 79
- (B)  $201 \text{ r } 2$
- (C)  $701 \text{ r } 2$
- (D) 709

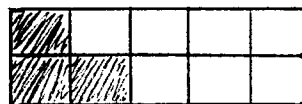
3. There are 4 rows of chairs, and 12 chairs in each row. How do you find out the total number of chairs?

- (A)  $12 + 4$
- (B)  $12 - 4$
- (C)  $12 \times 4$
- (D)  $12 \div 4$



4. In the figure above, if the distance from A to C is 30 kilometres, what is the distance in kilometres from B to C?

- (A)  $30 + 10$
- (B)  $30 - 10$
- (C)  $30 \times 10$
- (D)  $30 \div 10$



5. What part of the figure above is dark?

- (A)  $\frac{1}{3}$
- (B)  $\frac{3}{5}$
- (C)  $\frac{3}{7}$
- (D)  $\frac{3}{10}$

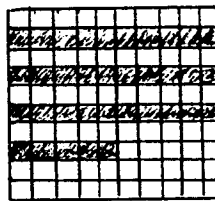
6. Which is NOT equal to  $\frac{4}{10}$ ?

(A)  $\frac{1}{4}$

(B)  $\frac{2}{5}$

(C)  $\frac{10}{25}$

(D)  $\frac{20}{50}$



9. If the large square above represents 1 unit, which decimal shows the amount that is dark?

(A) 0.35

(B) 3.5

(C) 30.5

(D) 35.100

7. Which is between  $\frac{3}{4}$  and  $\frac{4}{3}$ ?

(A) 1

(B) 3

(C)  $\frac{1}{2}$

(D)  $\frac{3}{2}$

10.  $0.25 =$

(A)  $2\frac{1}{2}$

(B)  $\frac{1}{2}$

(C)  $\frac{2}{5}$

(D)  $\frac{1}{4}$

8.  $\frac{1}{2} + \frac{1}{3} =$

(A)  $\frac{1}{5}$

(B)  $\frac{2}{6}$

(C)  $\frac{2}{5}$

(D)  $\frac{5}{6}$

11.  $2 - 0.1 =$

(A) 1

(B) 1.9

(C) 2.1

(D) 2.9

12.

$$0.6 \times 10 =$$

- (A) 0.06
- (B) 0.60
- (C) 6
- (D) 60

13. Which of the following numbers is the LARGEST?

- (A) 0.1
- (B) 0.01
- (C) 0.111
- (D) 0.1101

14.



In the drawing above, if the distance from A to B is 6 metres, then the distance in metres from C to D is

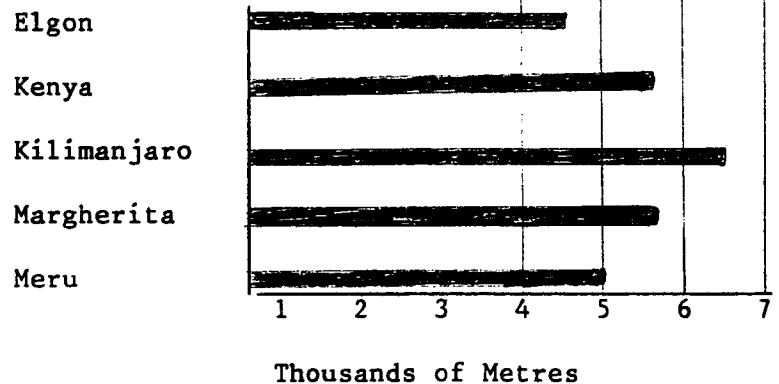
- (A) 5
- (B) 12
- (C) 15
- (D) 30

15. 1% of 400 is

- (A) 1
- (B) 4
- (C) 40
- (D) 400

Items 16-17 refer to the following graph:

Heights of Five East African Mountain Peaks in Metres



16. According to the graph, the height of Mt. Kilimanjaro, in metres, is about

- (A)  $6,000 \frac{1}{2}$
- (B) 6,005
- (C) 6,050
- (D) 6,500

17. Which two of the peaks are most nearly the same height?

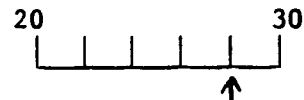
- (A) Kilimanjaro and Kenya
- (B) Kenya and Margherita
- (C) Meru and Elgon
- (D) Margherita and Meru

18. The height of a man is closest to 2

- (A) millimetres
- (B) metres
- (C) kilometres
- (D) centimetres

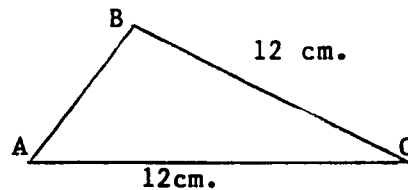
19. There are twelve inches in one foot. How many square inches are there in a square foot?

- (A) 12
- (B) 36
- (C) 48
- (D) 144



20. In the figure above, the arrow points to

- (A)  $20 \frac{4}{5}$
- (B)  $20 \frac{5}{6}$
- (C) 24
- (D) 28



Note: Figure not drawn to scale

21. If the perimeter of  $\triangle ABC$  is 30 centimetres, what is the length, in centimetres, of side AB?

- (A)  $2 \frac{1}{2}$
- (B) 3
- (C) 6
- (D) 18

22. Two cities are 12 kilometres apart. Each day, a bus makes 3 round trips between these cities. How many kilometres does the bus travel each day?

- (A) 72
- (B) 36
- (C) 15
- (D) 4

24. An island has an area of about 300 square miles. The government reports that one third of the island is not suitable for cultivation. About how many square miles of this island are suitable for cultivation?

- (A) 50
- (B) 100
- (C) 150
- (D) 200

23. A meal costs \$15.00. If a 10% service charge is to be added to the bill, what would the total charge be?

- (A) \$15.10
- (B) \$16.00
- (C) \$16.50
- (D) \$25.00

	Highest	Lowest
Eldoret	23.6°	9.5°
Magadi	34.9°	23.1°
Nakura	26.4°	10.0°
Narok	24.5°	8.3°

25. The chart above shows the average (mean) high and low temperatures for four cities in a certain year. In which of the cities was there the greatest difference between the average high and the average low?

- (A) Eldoret
- (B) Magadi
- (C) Nakura
- (D) Narok

26. In an office building, each office has about 22 square metres of floor space. In this building, a square office would measure about how many metres on each side?

- (A) 4.7
- (B) 5.5
- (C) 11
- (D) 484

27. One number is 3 more than twice another. If  $x$  represents the smaller number which of the following represents the larger number?

- (A)  $2x + 3$
- (B)  $5x$
- (C)  $3(2x)$
- (D)  $2x - 3$

28. If  $a = -3$  and  $b = 3$ , then  $2a + b^2 =$

- (A) 7
- (B) 3
- (C) 9
- (D) 12

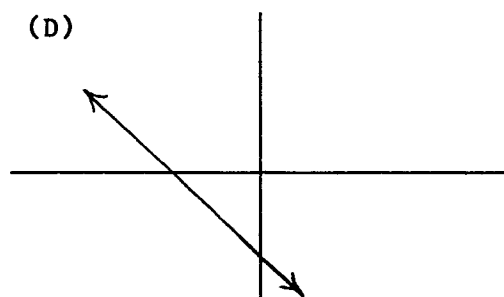
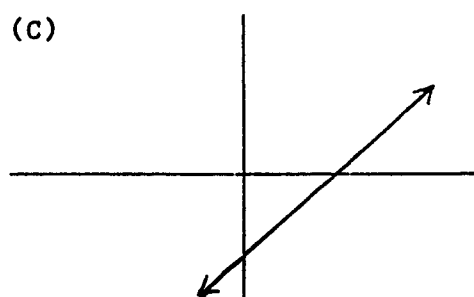
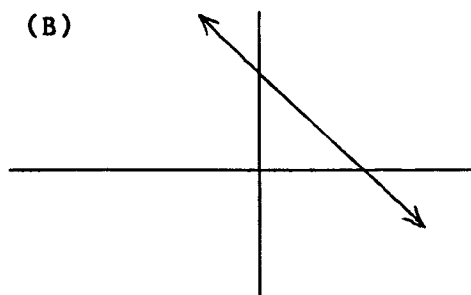
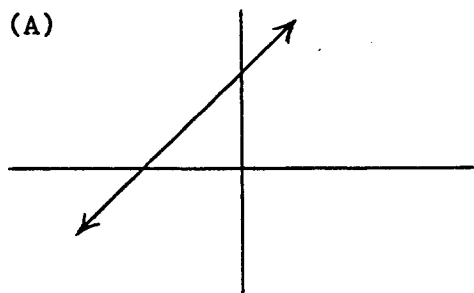
29. If  $2x - 3 = 17$ , then  $x =$

- (A) 7
- (B) 10
- (C) 14
- (D) 20

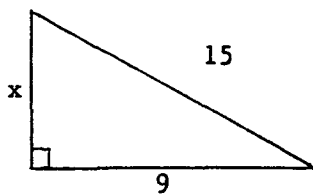
30.  $x + \frac{1}{2} =$

- (A)  $\frac{1}{x + 2}$
- (B)  $\frac{x + 1}{x + 2}$
- (C)  $\frac{2x + 1}{2}$
- (D)  $\frac{x + 1}{2}$

31. Which of the following shows the graph of  $x - y = 2$ ?







Note: Figure not drawn to scale.

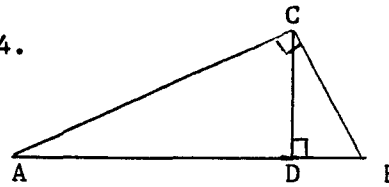
32. In the triangle above,  $x =$

- (A) 6
- (B) 12
- (C) 24
- (D)  $\sqrt{306}$

33. In quadrilateral ABCD,  $\angle A = 60^\circ$  and the other three angles are equal. What is the degree measure of  $\angle B$ ?

- (A)  $220^\circ$
- (B)  $100^\circ$
- (C)  $60^\circ$
- (D)  $40^\circ$

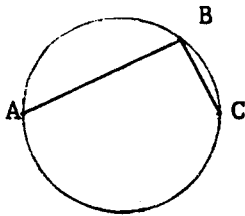
34.



In triangle ABC above, CD is an altitude to AB, and  $\angle ACB$  is a right angle. Which of the triangles shown must be similar?

- (A) None
- (B)  $\triangle ACD$  and  $\triangle CBD$  only
- (C)  $\triangle ABC$  and  $\triangle ACD$  only
- (D)  $\triangle ABC$ ,  $\triangle ACD$ , and  $\triangle CBD$

35.



In the figure above,  $\angle ABC$  is a right angle. If the centre of the circle is called Q, what can be said about the location of Q?

- (A) Q is inside  $\triangle ABC$
- (B) Q is outside  $\triangle ABC$
- (C) Q is on  $\overline{AC}$
- (D) The location of Q depends on the lengths of  $\overline{AB}$  and  $\overline{BC}$

36. Which CANNOT be the intersection of 3 planes?

- (A) 1 point
- (B) 1 line
- (C) 3 concurrent lines
- (D) 3 parallel lines

**GHANA LIVING STANDARDS SURVEY**

**EDUCATION MODULE**

**English Reading Questions**

Directions: For questions 1-9, read the passages below. Each passage is followed by questions. Choose the correct answer to each question and mark the letter of that answer on your answer sheet.

The Herring Gull is especially good at seizing food from other birds. It is about twenty-four inches long, and it is the gull that you most often see at the beach. It will often chase a bird that is carrying a fish or a stolen egg home to eat. The Herring Gull keeps attacking the other bird until it drops the egg or the fish. Of course the egg will break if it hits the ground. But Herring Gulls are so fast and agile they can sometimes catch an egg in mid-air.

1. What is a Herring Gull?
  - (A) A bird
  - (B) A fish
  - (C) An egg
  - (D) A beach
2. Which of the following is the best title for this passage?
  - (A) How Herring Gulls Get Food
  - (B) Catching eggs
  - (C) How Herring Gulls Fly Faster than Other Birds
  - (D) Eating Habits of Birds
3. How long is a Herring Gull?
  - (A) 12 inches
  - (B) 18 inches
  - (C) 24 inches
  - (D) 32 inches

You could smell the fish market long before you could see it. As you came closer you could hear merchants calling out about fresh catches or housewives arguing about prices. Soon you could see the market itself, brightly lit and colorful. You could see fishing boats coming in, their decks covered with silver-grey fish.

4. What kind of a market is described above?

- (A) A vegetable market
- (B) A meat market
- (C) A fish market
- (D) A fruit market

5. What could you see coming in?

- (A) Tug boats
- (B) Rowboats
- (C) Fishing boats
- (D) Sailboats

6. What covered the decks of the boats?

- (A) Rope
- (B) People
- (C) Boxes
- (D) Fish

The cat brushed against the old man. He did not move. He only stood, staring up the window of the house. The party inside looked warm and friendly, but no one noticed him. The old man walked sadly on, followed by the cat.

7. What kind of animal was with the old man?

(A) Mouse

(B) Dog

(C) Cat

(D) Bird

8. What was inside the house?

(A) A party

(B) Some dogs

(C) An old lady

(D) A meeting

9. The man is described as being

(A) Old

(B) Young

(C) Thin

(D) Small

Directions: For questions 10-15, read the passage below. Each line of the passage has a number. In each line, there is a box with four possible choices. Pick the choice that best completes the sentence in each numbered line. Mark the letter (A, B, C, or D) of the choice on your answer sheet.

10. Sound is something we 

(A) hears.
(B) hearing.
(C) heard.
(D) hear.

 It comes to your
11. 

(A) eyes
(B) nose
(C) ears
(D) mouth

 in different ways. It might be pleasant,
12. like the voice of a friend, 

(A) when
(B) as
(C) or
(D) since

 unpleasant, like the yelp of a
13. dog that has been struck by a 

(A) horn.
(B) car.
(C) road.
(D) bridge.

 Some sounds are loud,
14. and some are soft; some are high, and some are 

(A) full.
(B) low.
(C) quite.
(D) big.

 Sound is
15. very 

(A) importance
(B) importantly
(C) important
(D) import

 to us because it is the basic means of communication.

Questions 16-18 are also about the group of sentences on the previous page.  
Choose the best answer for each of these questions and mark it on your answer sheet.

16. What does yelp in line 12 mean?

- (A) noise    (B) motion    (C) place    (D) piece

17. Which of the phrases below is another example of a pleasant sound, similar to the phrase in the sentence that begins in line 12, "like the voice of a friend"?

- (A) Like the hiss of a snake    (B) Like the rumble of thunder  
(C) Like the honk of a horn    (D) Like the song of a bird

18. Which sentence below has almost the same meaning as the sentence that begins in line 14?

- (A) It is meaningful to communicate with sound.  
(B) The main way we communicate is with sound.  
(C) The meaning of sound is basic to communication.  
(D) In order to communicate, we need basic sounds.



Directions: For question 19-29, read the passage below. Each line of the passage has a number.

In each line, there is a box with four possible choices. Pick the choice that best completes the sentence in each numbered line. Mark the letter (A, B, C, or D) of the choice on your answer sheet.

19.

In the late eighteenth century England had all the things necessary for the growth of

- |                                                                         |
|-------------------------------------------------------------------------|
| A) industry.<br>B) industrial.<br>C) industrially.<br>D) industrialize. |
|-------------------------------------------------------------------------|

20.

She possessed money to invest, an ample labor supply

- |                                                   |
|---------------------------------------------------|
| (A) too<br>(B) and<br>(C) however<br>(D) although |
|---------------------------------------------------|

essential natural resources. Since

21.

the sixteenth century, wealth had been pouring into England from colonies in America and

- |                                                      |
|------------------------------------------------------|
| (A) trade<br>(B) traded<br>(C) trades<br>(D) trading |
|------------------------------------------------------|

22.

posts in Asia. Her large merchant fleet brought her

- |                                                                               |
|-------------------------------------------------------------------------------|
| (A) an example<br>(B) an abundance<br>(C) a contribution<br>(D) a distinction |
|-------------------------------------------------------------------------------|

of raw materials-more than could

23. 

(A)	on
(B)	by
(C)	over
(D)	against

 the old system of manufacture. This surplus and the growing demand for goods encouraged
24. the development of new and faster methods of manufacture. Another favorable factor in England 

(A)	is
(B)	was
(C)	has been
(D)	has to be
25. the supply of cheap labor. 

(A)	Sailors
(B)	Diplomats
(C)	Beggars
(D)	Workers

 could move about freely and employers had greater liberty in
26. deciding what to make and how to make it. Finally the presence of large amounts of coal 

(A)	made
(B)	are made
(C)	is making
(D)	will make

27.

possible

- (A) predictable
- (B) illustrative
- (C) extensive
- (D) individual

use of steam power, and the plentiful supply of iron

encouraged the manufacture of tools and machinery.

28.

No other country in Europe had

- (A) so
- (B) too
- (C) such
- (D) much

favorable conditions for a vast increase

29.

in production.

- (A) As a result,
- (B) Likewise,
- (C) In addition,
- (D) On the other hand

the Industrial Revolution had its beginnings in England.

English Reading Test Answer Sheet

Name: \_\_\_\_\_ Sex: \_\_\_\_\_ Age: \_\_\_\_\_

Level of Schooling: \_\_\_\_\_

Test begun: \_\_\_\_\_ Test Finished: \_\_\_\_\_ Total Time: \_\_\_\_\_

1 _____	11 _____	21 _____
2 _____	12 _____	22 _____
3 _____	13 _____	23 _____
4 _____	14 _____	24 _____
5 _____	15 _____	25 _____
6 _____	16 _____	26 _____
7 _____	17 _____	27 _____
8 _____	18 _____	28 _____
9 _____	19 _____	29 _____
10 _____	20 _____	

Score Col. 1

Score Col. 2

Score Col. 3

Total Score

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Answer Sheet for

COLOURED PROGRESSIVE MATRICES (1947)

J. C. Raven  
Sets A, A<sub>B</sub>, B

Name ..... Sex ..... Age .....

School ..... Grade .....

Test Begun ..... Test Ended ..... Total Time .....

A			A <sub>B</sub>			B		
1			1			1		
2			2			2		
3			3			3		
4			4			4		
5			5			5		
6			6			6		
7			7			7		
8			8			8		
9			9			9		
10			10			10		
11			11			11		
12			12			12		

Total Score ..... Percentile .....

Published by The Psychological Corporation, under special arrangements  
with H.K. Lewis and Company, Ltd., London, England.  
All rights reserved.

Reading and Mathematics Answer Sheet

Name: \_\_\_\_\_ Sex: \_\_\_\_\_ Age: \_\_\_\_\_

Level of Schooling: \_\_\_\_\_

Test begun: \_\_\_\_\_ Test Finished: \_\_\_\_\_ Total Time: \_\_\_\_\_

**MATHEMATICS**

- 1 \_\_\_\_\_  
2 \_\_\_\_\_  
3 \_\_\_\_\_  
4 \_\_\_\_\_  
5 \_\_\_\_\_  
6 \_\_\_\_\_  
7 \_\_\_\_\_  
8 \_\_\_\_\_

TOTAL

--

**READING**

- 1 \_\_\_\_\_  
2 \_\_\_\_\_  
3 \_\_\_\_\_  
4 \_\_\_\_\_  
5 \_\_\_\_\_  
6 \_\_\_\_\_  
7 \_\_\_\_\_  
8 \_\_\_\_\_

TOTAL

--

Mathematics Test Answer Sheet

Name: \_\_\_\_\_ Sex: \_\_\_\_\_ Age: \_\_\_\_\_

Level of Schooling: \_\_\_\_\_

Test begun: \_\_\_\_\_ Test Finished: \_\_\_\_\_ Total Time: \_\_\_\_\_

1 _____	13 _____	25 _____
2 _____	14 _____	26 _____
3 _____	15 _____	27 _____
4 _____	16 _____	28 _____
5 _____	17 _____	29 _____
6 _____	18 _____	30 _____
7 _____	19 _____	31 _____
8 _____	20 _____	32 _____
9 _____	21 _____	33 _____
10 _____	22 _____	34 _____
11 _____	23 _____	35 _____
12 _____	24 _____	36 _____

Score Col. 1

Score Col. 2

Score Col. 3

Total Score

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Short English Reading Test

John is a small boy. He lives in a village with his brothers and sisters. He goes to school every week. In his school there are five teachers. John is learning to read at school. He likes to read very much. His father is a teacher, and his parents want him to become a school teacher too.

1. Who is John?
  - (A) An old man
  - (B) A small boy
  - (C) A school teacher
  - (D) A school
2. Where does John live?
  - (A) In a village
  - (B) In a city
  - (C) In a school
  - (D) In a forest
3. What does John do every week?
  - (A) Works with his father
  - (B) Plays with his friends
  - (C) Helps his brothers and sisters
  - (D) Goes to school
4. How many teachers are there at John's school?
  - (A) One
  - (B) Three
  - (C) Five
  - (D) Six
5. What is John doing at school?
  - (A) Helping the teacher
  - (B) Talking with his friends
  - (C) Learning to read
  - (D) Teaching the class
6. Who is a school teacher?
  - (A) John
  - (B) John's father
  - (C) John's brother
  - (D) John's mother
7. What do John's parents want him to do?
  - (A) Go to school
  - (B) Learn to read
  - (C) Obey his teachers
  - (D) Become a teacher
8. The best title for this story is
  - (A) John Learns to Read
  - (B) Why Reading is Important
  - (C) John's Village
  - (D) Schools in Ghana



## Short Mathematics Test

1.  $1 + 2 =$

5.  $24 + 17 =$

2.  $5 - 2 =$

6.  $33 - 19 =$

3.  $2 \times 3 =$

7.  $17 \times 3 =$

4.  $10 \div 5 =$

8.  $41 \div 7 =$

**GHANA STATISTICAL SERVICE**  
**Scoring Key for**  
**Short Reading and Mathematics Test**

**GHANA STATISTICAL SERVICE**  
**Scoring Key for**  
**Mathematics Test**

**MATHEMATICS**

1	3
2	3
3	6
4	2
5	41
6	14
7	51
8	5R.6

A	96
C	35
D	43
B	33
B	32
C	31
C	30
B	29
B	28
A	27
A	26
C	25

1	A
2	D
3	C
4	B
5	D
6	A
7	A
8	D
9	A
10	D
11	B
12	C

Also  
 acceptable  
 for Q.8:  
 5.86  
 56/7

**READING**

1	B
2	A
3	D
4	C
5	C
6	B
7	D
8	A

13	C
14	C
15	B
16	D
17	B
18	B
19	D
20	D
21	C
22	A
23	C
24	D