## **MINISTRY OF EDUCATION**

## **LITERACY AND NUMERACY ASSESSMENT (LANA)**

## YEAR 8 NUMERACY ASSESSMENT (SAMPLE TEST)

Time Allowed: 60 minutes

(An extra 10 minutes is allowed for reading this paper.)

There are sixty questions in this Assessment. Answer <u>all</u> the questions.

	INSTRUCTIONS:
1.	Check that your name is printed at the top of your Answer Sheet, and that it is correct.
2.	On your <b>Answer Sheet</b> , draw a cross in the box next to the letter of the <b>best</b> answer.
	For example, if you select B as your answer, you should draw a cross in the box next to the letter B.
	33 A B C D
3.	If you change your mind, shade out your answer as shown, and place a cross in the box for your new answer.
	33 A B C D
4.	If you change your mind again and like your first answer better, shade out your second answer and tick $(\checkmark)$ your first answer.
	For example:  33 A B C D
5.	If your cross is too big for the box, or if you draw a circle, your answer will be marked wrong.
	cross is too big circles are not to be used
	32 A B C D D 34 A B C D D

Your supervisor or teacher can help you with these instructions but will NOT help you answer the questions.

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- 1. What is the simplest form as a fraction for 0.84?
  - A.  $\frac{84}{100}$

B.  $\frac{42}{50}$ 

C.  $\frac{21}{25}$ 

- D.  $\frac{17}{20}$
- 2. Joji pays \$1.80 daily and Ratu pays 90 cents daily as their bus fares from home to school and return. How much do the children spend on bus fares for two days?
  - A. \$2.70

B. \$5.40

C. \$8.10

- D. \$10.80
- 3. What is the total weight of the fish shown below?







3.5 kg

2.5 kg

2.25 kg

750 g

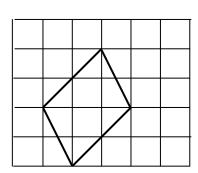
A. 9 kg

B. 90 g

C. 900 g

D. 0.925 kg

4.



What is the area of the shape on the grid above?

A.  $2 \text{ cm}^2$ 

B. 4 cm<sup>2</sup>

C. 6 cm<sup>2</sup>

D. 8 cm<sup>2</sup>

5. Set 
$$Z = \left\{ \frac{1}{2}, \frac{2}{6}, \frac{3}{4}, \frac{2}{3} \right\}$$

The smallest fraction in Set Z is

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

B.  $\frac{2}{6}$ 

C.  $\frac{3}{4}$ 

- D.  $\frac{2}{3}$
- 6. How many bags of superphosphate will be equal in weight to a bag of flour shown below?



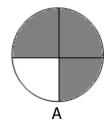
7. Which number does **not** belong to the number pattern in Set X?

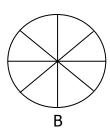
$$X = {... 15, 20, 25, 31, 35, 40 ...}$$

8. 0.12 + 1.4 is equal to

9. 279 x 0.1 is

10.





Jina shaded  $\frac{3}{4}$  of Circle A. What fraction of Circle B should Sera shade to make it equivalent to Jina's?

A.  $\frac{2}{8}$ 

B.  $\frac{3}{8}$ 

C.  $\frac{4}{8}$ 

D.  $\frac{6}{8}$ 

11. A soccer team has 11 players. How many teams can be formed in a class of 33 students?

A. 5

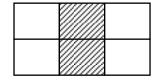
B. 4

C. 3

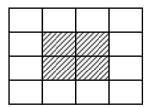
D. 2

12. Which diagram represents  $\frac{1}{4}$ ?

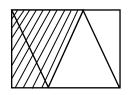
A.



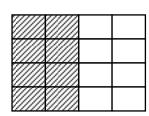
В.



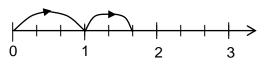
C.



D.



13.



The fraction shown on the number line is

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

B.  $1\frac{2}{3}$ 

C.  $2\frac{2}{3}$ 

D.  $3\frac{2}{3}$ 

14. What is the lowest common multiple of 4 and 6?

> A. 10

В. 12

C. 24 D. 36

15. In the numeral 731.854, the underlined digit 5 stands for:

> A. tens

В. hundreds

C. hundredths D. tenths

16. Calculate 2<sup>3</sup> + 3<sup>4</sup>

> A. 89

В. 99

C. 109 D. 119

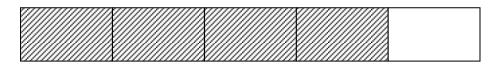
7.15 pm converted to 24 hour clock time is: 17.

> A. 1515 hrs

B. 1915 hrs

C. 2015 hrs D. 2115 hrs

18.



What percentage of the above shape is shaded?

A. 10 % В. 20 %

C. 80 % D. 90 %

Mary bought the following groceries from a supermarket as shown below. 19.

2 kg potatoes 2 tins of fish 4 pkts of milk

\$3.50

- \$2.58

\$7.68

How much change did she get if she paid with a \$20.00 note?

A. \$15.24 В. \$13.76

C. \$6.42 D. \$6.24 20. What is the largest whole number you can make from the numbers on the jerseys shown above?



A. 9 532

B. 95 632

C. 65 932

- D. 96 532
- 21. Which point A, B, C or D marks the fraction  $\frac{2}{5}$  correctly on the number line?



- 22. If n = 7, find  $n^2 + 3$ .
  - A. 17

B. 10

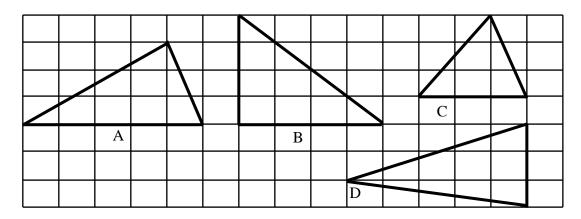
C. 46

- D. 52
- 23. Four friends saved \$1 024.80 for Christmas. If they shared the amount equally, how much will each friend get?
  - A. \$256.20

B. \$255.20

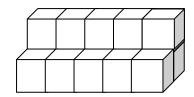
C. \$254.00

- D. \$256.40
- 24. Which of the shapes A, B, C or D has the largest area?



25.	A shape which has all right angles, opposites sides parallel and all sides congruent is a				
	A.	square.	В.	parallelogram.	
	C.	trapezium.	D.	rectangle.	
26.	Derek has 12 shirts in his closet. If 2 out of every 3 of these shirts are striped, how many striped shirts does Derek have in his closet?				
	A.	2	B.	8	
	C.	11	D.	18	
27.	How	How many minutes are there between 8.20 pm and 10.05 pm?			
	A.	5 minutes	B.	145 minutes	
	C.	100 minutes	D.	105 minutes	
28.	Rita is always early to school every morning. She arrives in school at 7 o'clock. What is her arrival time in 24 hour clock time?				
	A.	0600 hrs	B.	0700 hrs	
	C.	1800 hrs	D.	1900 hrs	
29.	Mere scored 22 out of 50 in her English Test. What is her mark as a percentage?				
	A.	88 %	B.	44 %	
	C.	50 %	D.	22 %	
30.	What is 30 when written as a product of its prime factors?				
	A.	3 × 10	B.	$1 \times 2 \times 3 \times 5$	
	C.	15 x 2	D.	2 × 3 × 5	
31.	A bus travelled 240 km from Suva to Nadi in 4 hours. It only stopped when it reached Nadi. What was the average speed of the bus?				
	A.	60 km/h	B.	236 km/h	
	C.	244 km/h	D.	960 km/h	

32. Sonia is trying to build a rectangular prism from blocks.



How many more blocks will she need to complete it?

A. 5

B. 10

C. 11

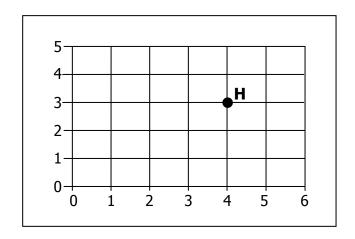
D. 20

- 33. Change  $\frac{18}{4}$  into mixed fraction.
  - A.  $\frac{4}{8}$

B.  $\frac{9}{2}$ 

C.  $3\frac{2}{4}$ 

- D.  $4\frac{1}{5}$
- 34. What are the coordinates of point  $\mathbf{H}$ ?



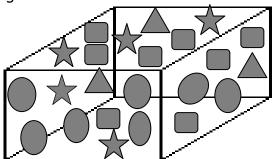
A. (5, 2)

B. (4, 3)

C. (3, 4)

D. (5, 4)

35. A christmas decoration box contains four different shapes. Anna picked a shape without looking.



Which shape has the **most** chance to be picked?

A. Star

B. Oval

C. Square

- D. Triangle
- 36. 2t + 4 = 20 Find the value of t.
  - A. 8

B. 10

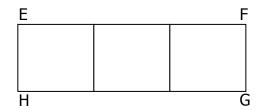
C. 12

- D. 16
- 37. The bus journey from point A to point B is 84 km. After travelling at a constant speed of 60 km/h for 44 minutes the bus stopped. How much of the journey is left?
  - A. 20 km

B. 40 km

C. 60 km

- D. 80 km
- 38. The perimeter of a square is 44 cm.



Three of these squares are joined together to make the rectangle EFGH.

What is the perimeter of the rectangle?

A. 484 cm

B. 176 cm

C. 132 cm

D. 88 cm

39. What number should be put in the blank to give the correct answer?

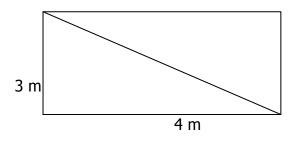
 $\underline{\phantom{0}}$  + 2.31 + 5.00 + 1.1 + 0.2 = 8.62

A. 1.0

B. 0.1

C. 0.01

- D. 0.001
- 40. Mrs. Prasad put a timber diagonally in her rectangular hen coop to stop the chicks from going into the rooster's side. What is the area of the triangular piece?



A.  $5 \text{ m}^2$ 

B.  $6 \text{ m}^2$ 

C.  $7 \text{ m}^2$ 

- D. 12 m<sup>2</sup>
- 41. Lele takes a piece of ribbon 36 cm long and folds it to form a square. The two ends of the ribbon neatly join. Find the area of the square.
  - A. 18 cm<sup>2</sup>

B. 27 cm<sup>2</sup>

C. 36 cm<sup>2</sup>

D. 81 cm<sup>2</sup>

42. The minute hand is missing.



What time is this clock showing?

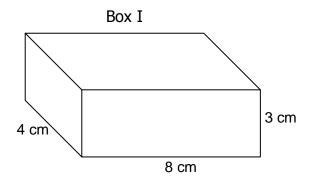
A. 4 o'clock

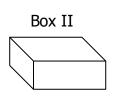
B. half past 4

C. 5 o'clock

D. half past 5

43. Ken was able to fit exactly 12 of Box II into Box I.





Calculate the volume of Box II.

A. 8 cm<sup>3</sup>

B. 15 cm<sup>3</sup>

C.  $12 \text{ cm}^3$ 

D. 96 cm<sup>3</sup>

44. John hires a car for 4 days. It costs him \$90.00. How much will it cost his friend Sam to hire it for 7 days?

A. \$157.00

B. \$157.50

C. \$1 570.00

D. \$1 570.50

45. Rakesh went shopping and bought the following items.

Shopping List	Price List
2 kg dhal	Dhal - \$1.62 a kg
2 bundles cabbage	Cabbage - \$1.50 a bundle

How much change will he get, if he paid with a \$50 note?

A. \$14.73

B. \$43.76

C. \$45.38

D. \$46.88

46. The sum of dots in the opposite sides of a die is 7.



What is the sum of the number of dots at the bottom of all the dice in the picture above?

A. 23

B. 22

C. 21

D. 13

47.	If the circumference of a circle is doubled, how does the diameter of the circle
	change?

- A. The diameter stays the same.
- B. The diameter becomes half as long.
- C. The diameter becomes twice as long.
- D. The diameter becomes four times as long.
- 48. Mr Nandan bought 10 bundles of dalo at \$100 and sold them at \$15.00 a bundle. Calculate the percentage profit.
  - A. 10 %

B. 25 %

C. 50 %

- D. 75 %
- 49. Which metric unit will measure the volume of soil in a real truck like this?



A. cubic metres

B. square metres

C. cubic centimetres

- D. square centimetres
- 50. Last year there were 1 172 students at Vonu High School. This year there are 15 percent more students than last year. Approximately how many students are at Vonu High School this year?
  - A. 1 400

B. 1500

C. 1600

D. 1800

51. Here is a timetable for volunteers who helped at the Children's Ward in the hospital.

Name	Start	Finish
Mau	8.30 am	3.30 pm
Fifita	10.00 am	6.30 pm
Helen	1.30 pm	8.00 pm
Jay	4.00 pm	10.30 pm

Which of these volunteers worked the longest?

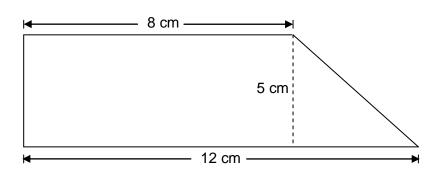
A. Mau

B. Fifita

C. Helen

D. Jay

52.



Find the area of the shape given above.

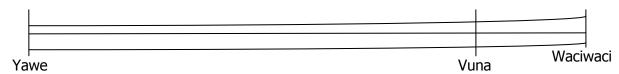
A. 80 cm<sup>2</sup>

B. 60 cm<sup>2</sup>

C.  $40 \text{ cm}^2$ 

D. 50 cm<sup>2</sup>

53. The road from Yawe to Vuna is four times the distance from Vuna to Waciwaci.



The distance from Yawe to Waciwaci is 120 kilometres. What is the distance from Vuna to Waciwaci?

A. 15 km

B. 20 km

C. 24 km

D. 30 km

54. Which of the following has three prime numbers?

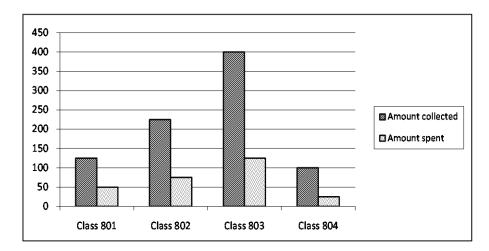
A. 9, 31, 73

B. 13, 31, 73

C. 20, 31, 73

D. 31, 52, 73

55. The graph below shows the income and expenses for the 4 different Class 8s in a primary school. Use the graph to answer the question.



How much profit did Class 804 make?

A. 60%

B. 66%

C. 68%

- D. 75%
- 56. Which of the following is the largest fraction?
  - A.  $1\frac{1}{4}$

B.  $\frac{7}{5}$ 

C.  $\frac{13}{10}$ 

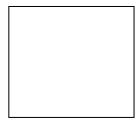
- D.  $\frac{10}{7}$
- 57. Lusi wanted to add 90 to a number but subtracted 90 by mistake. Her answer was 140. What should have been the answer?
  - A. 0

B. 70

C. 230

D. 320

58. The length of the side of the square given below is 8.5 m.



Calculate the area of the square.

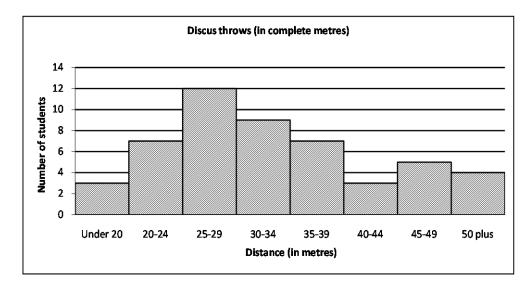
A. 7.225 m<sup>2</sup>

B. 72.25 m<sup>2</sup>

C. 722.5 m<sup>2</sup>

D. 7 225 m<sup>2</sup>

59. The graph below shows the distances of discus thrown during training in a secondary school.



How many students threw the discus beyond 49 metres?

A. 3

B. 4

C. 5

D. 6

60. This is a movie program.

Movie Program					
Movie Name	Start Time of Movie	Length of Movie			
Blue Sky	10.00am, 12.30pm, 3.30pm	1hr 35mins			
Queen's Life	3.00pm, 7.00pm	2 hrs			
My Home	11.00am, 2.15pm, 6.00pm	1hr 40mins			
Cats and Dogs	2.05pm, 5.00pm	2hrs 30mins			

Sam watched *Cats and Dogs* from 2.05 pm and Sita went in at 3.00 pm to see *Queen's Life*. Chris went in to see *Blue Sky* at 3.30 pm whereas Dona went in to see *My Home* at 2.15 pm. Who would come out of the movie first?

A. Chris

B. Dona

C. Sam

D. Sita

## THE END