

**GUYANA  
MINISTRY OF EDUCATION  
NATIONAL GRADE SIX ASSESSMENT  
2010  
MATHEMATICS  
PAPER 1**

TIME: 1 hour 10 minutes

**READ THESE INSTRUCTIONS CAREFULLY BEFORE YOU ATTEMPT TO ANSWER THE QUESTIONS.**

- 1. WRITE YOUR CANDIDATE NUMBER ON THE ANSWER SHEET AND UNDERLINE THE SUBJECT.**
- 2. This test contains 40 questions. You are required to answer ALL questions. Four responses are given for each question. The responses are A, B, C and D. Only ONE response is correct.**
- 3. If you are not sure of the answer to a question, then choose the one which you think is BEST. On your answer sheet, draw a heavy black line through the letter you have chosen.**
- 4. BE SURE THAT THE QUESTION NUMBER IN THE BOOKLET IS THE SAME AS THE ONE YOU HAVE USED ON YOUR ANSWER SHEET.**

Here is an example done for you.

		<b>ANSWER SHEET</b>
1.	The sum of 4 and 5 is	1. A <b>B</b> C D
(A)	1	(B) 9
(C)	20	(D) 45

A heavy black line has been drawn through the letter B on the answer sheet because 9, the correct answer, is next to B.

5. If you make a mistake, erase the line cleanly, then draw a heavy black line through the letter next to the answer you have now chosen.
6. **REMEMBER**, each answer **MUST** only be shown by a heavy black line on your Answer Sheet.
7. Remember only one answer must be provided for each question.
8. **DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO.**

1. What is the value of the underlined digit in 88888?

- (A) 8 000      (B) 800  
(C) 80      (D) 8

2. Which is a prime number?

- (A) 7      (B) 9  
(C) 15      (D) 21

3. Which is a Roman Numeral?

- (A) \*      (B) 0  
(C) 9      (D) X

4. Angles are measured in

- (A) litres.      (B) squares.  
(C) degrees.      (D) grams.

5. A multiple of 12 is

- (A) 1      (B) 2  
(C) 21      (D) 24

6. Which is an acute angle?

- (A)   
(B)   
(C)   
(D) 

7. Which of the following is a triangular base pyramid?

- (A)   
(B)   
(C)   
(D) 

8. Which set is equal to donkeys that can fly?
- (A) { } (B) {bat}  
(C) {eagle} (D) {flying fish}

9. A subset of {A, B, C} is
- (A) {A, C, D} (B) {B, C, A}  
(C) {B, A, E} (D) {C, A, G}

10. Which one of the following represents a ratio relationship?
- (A)  $8 \div 5$  (B) 8:5  
(C) 85% (D) 8.5

Use Figure 1 below to answer question 11.

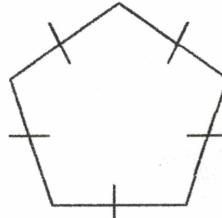
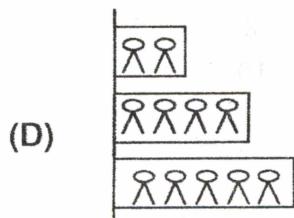
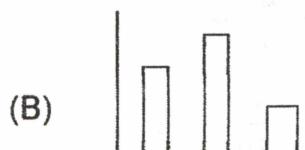
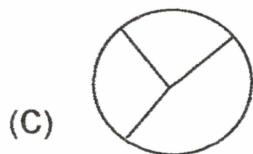
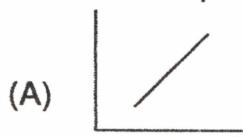


Figure 1

11. The formula for finding the perimeter for the regular pentagon in figure 1 is
- (A) 2s (B) 3s  
(C) 4s (D) 5s

12. Which one represents a line graph?



Use Figure 2 below to answer question 13.

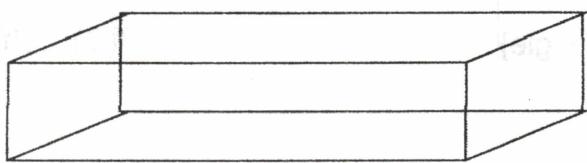


Figure 2

13. How many edges are in the cuboid above?
- (A) 4                                 (B) 8  
(C) 12                               (D) 16
14. One **million five hundred thousand two** can be written as
- (A) 15 500 002                           (B) 1 502 000  
(C) 1 500 020                           (D) 1 500 002
15.  $32.28 \div 100$  is
- (A) 0.3228                               (B) 3.228  
(C) 32.28                               (D) 322.8
16. Which of the following is equal to 90 450?
- (A)  $900 + 400 + 50$                        (B)  $9000 + 400 + 50$   
(C)  $90 000 + 400 + 50$                    (D)  $90 000 + 4000 + 50$
17.  $\frac{2}{3} \times \frac{4}{7} =$
- (A)  $\frac{6}{10}$                                    (B)  $\frac{18}{14}$   
(C)  $\frac{8}{10}$                                    (D)  $\frac{8}{21}$

18. Which digits will complete the quotient in the division sum below?

$$\begin{array}{r} 7 \\ 8 \overline{) 5679} \\ -56 \\ \hline 17 \end{array}$$

(A) 709

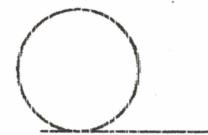
(B) 097

(C) 97

(D) 09

19. Which diagram shows the chord of the circle?

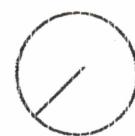
(A)



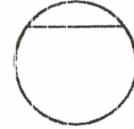
(B)



(C)



(D)



20. 6.579 m express in centimetres is

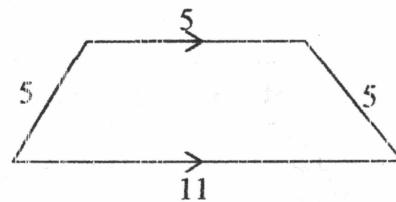
(A) 0.6579

(B) 65.79

(C) 657.9

(D) 6579

Use Figure 3 below to answer question 21.



**Figure 3**

21. The perimeter of the shape in Figure 3 is

(A) 10

(B) 15

(C) 26

(D) 65

22. How many whole numbers are in the set of numbers greater than 104 but less than 110?

(A) 3

(B) 4

(C) 5

(D) 6

Study the Venn diagram in Figure 4, then answer question 23.

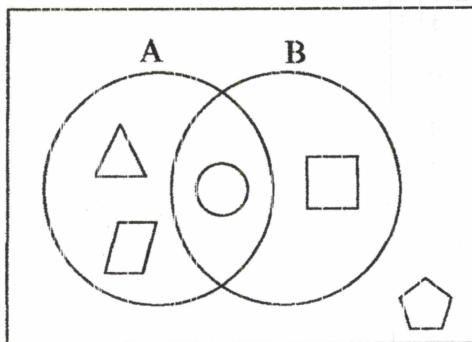


Figure 4

23. Which element is in neither A nor B?

- (A) (B)   
(C) (D)

24. 425% expressed as a decimal is

- (A) 4.25 (B) 42.5  
(C) 425 (D) 0.425

Use the pictograph for Questions 25 and 26.

Number of Books Read	
Mystery	
Biography	
Animal Stories	
History	

Each stands for 5 books.

25. How many more mysteries than animal stories were read?

- (A) 2 (B) 5  
(C) 10 (D) 15

26. How many more history books need to be read to equal the number of biographies read?
- (A) 5                                  (B) 10  
(C) 20                                  (D) 25
27. Look at the number pattern below. What is the next number likely to be?  
72, 63, 54, 45, \_\_\_\_\_
- (A) 36                                  (B) 27  
(C) 18                                  (D) 9
28. Roy arrived at school sports at 10:30 hours and spent 3 hours 45 minutes. At what time did he leave?
- (A) 14:45 hours                          (B) 14:15 hours  
(C) 10:45 hours                           (D) 10:30 hours
29. The smallest number that can be divided by 6, 9 and 12 and leaving a remainder of 1 is
- (A) 28.                                  (B) 36.  
(C) 73.                                    (D) 145.

Use Figure 5 below to answer question 30.

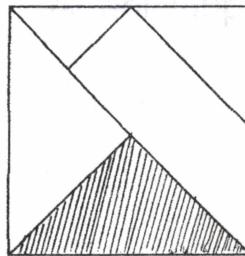


Figure 5

30. What fraction of the whole shape in Figure 5 is shaded?
- (A)  $\frac{1}{16}$                                       (B)  $\frac{1}{8}$   
(C)  $\frac{1}{4}$     (D)  $\frac{1}{2}$

31. The volume of a box = area of base  $\times$  height.  
If the volume of a box is  $400 \text{ cm}^3$  and the area of the base is  $40 \text{ cm}^2$ , what is the height in cm of the box?

(A) 10    (B) 40  
(C) 400    (D) 16 000

32. If 900 is increased by 30%, then the new number would be

(A) 270    (B) 630  
(C) 1170    (D) 90 030

Use the diagram below to answer question 33.

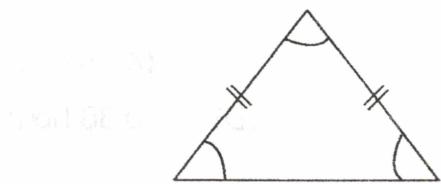


Figure 6

33. In the isosceles triangle above, the base angles are  $72^\circ$  each. What is the size of the third angle?

(A)  $36^\circ$     (B)  $72^\circ$   
(C)  $144^\circ$     (D)  $180^\circ$

Use Figure 7 below to answer question 34.

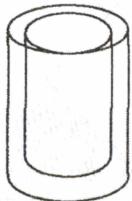


Figure 7

34. The diagram in Figure 7 represents a piece of pipe. The radius of the outer circle of the pipe is 10.5 cm and the radius of the inner circle is 5.4 cm. What is the thickness of the pipe?

(A) 4.1 cm    (B) 5.1 cm  
(C) 15.4 cm    (D) 15.9 cm

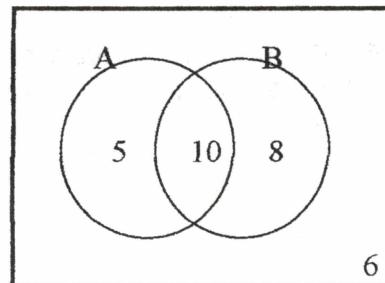
Use the Venn diagram in Figure 8 to answer questions 35 and 36.

In the Venn diagram below:

Set A has 15 girls with long hair

Set B has 18 girls with blue ribbon

6 girls have neither long hair nor blue ribbon



**Figure 8**

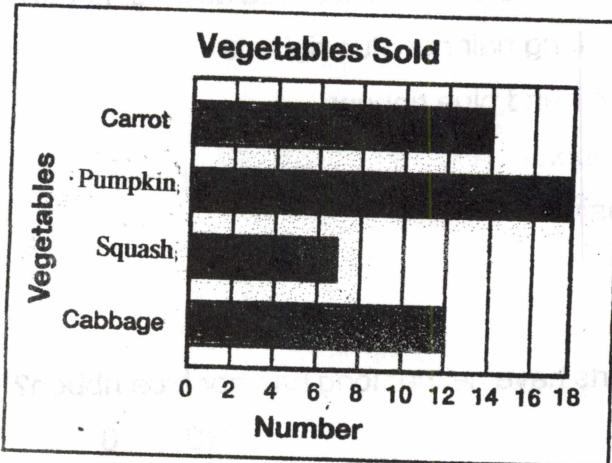
35. Set A intersect set B can be described as all girls with
- (A) neither long hair nor blue ribbons.
  - (B) long hair and blue ribbons.
  - (C) with ribbons.
  - (D) long hair.
36. How many girls have neither long hair nor blue ribbon?
- (A) 10
  - (B) 8
  - (C) 6
  - (D) 5
37. Lisa shared 120 stickers with her two sisters in the ratio 4:3:1. How many stickers make up the largest share?
- (A) 128
  - (B) 60
  - (C) 45
  - (D) 15



\$13 000

38. The marked price for the dress above was \$13 000. If 16% VAT is calculated on the marked price, what amount was paid for the dress?
- (A) \$208                                  (B) \$2080  
(C) \$11 920                              (D) \$15 080

Use the graph below to answer questions 39 and 40.



39. Amelia picks and then sells vegetables from her garden at a roadside stand. How many cabbages were sold?
- (A) 6                                        (B) 8  
(C) 10                                      (D) 12
40. How many more pumpkins than squash did Amelia sell?
- (A) 9                                        (B) 10  
(C) 11                                      (D) 12

**END OF TEST**