



EXAMINATIONS COUNCIL OF ZAMBIA

GRADE SEVEN COMPOSITE EXAMINATION 2015

Mathematics

SUBJECT 3/1

90 MINUTES

TD/M3/G7/2015

- 1 Read these instructions carefully.
 - 2 **DO NOT** turn this page before you are told. Your teacher will tell you when to turn this page to begin the questions.
 - 3 There are **60** questions in this **MATHEMATICS PAPER**. You will be given **EXACTLY 90 MINUTES** to do the questions.
 - 4 For each question, four answers are given, but only one of the four is right. Work out which is the **BEST** answer. Then, on your **ANSWER SHEET**, mark the box completely by shading the answer space of the letter of your choice. If you had chosen answer **D** for a question, you would show it like this:-

A	B	C	
---	---	---	---
 - 5 You must **SHADE** your answer spaces **COMPLETELY** and **DARKLY** using an **HB** pencil. If you have to change your answer, you must rub out the shading **VERY NEATLY** before shading the new one. **USE A CLEAN RUBBER.**
 - 6 When you have finished one page, go straight on without waiting to be told. If you have time left at the end of the question paper, use it to check your work carefully.
 - 7 Look at your **ANSWER SHEET**. On the top left hand side are boxes which should have Examination Year, your School Number and Examination Number. It should also say **Subject 3 Paper 1**.
 - 8 Look at your **ANSWER SHEET** again. At the bottom left hand side, it should have your Surname, Forename, Subject – **Mathematics**, Name of Primary School and your Secondary School of choice.
 - 9 **PUT UP YOUR HAND NOW IF:** You have any question.
You have the wrong answer sheet.
- You will **NOT** be able to ask questions once the examination has begun.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD.
USE ONLY AN HB / PENCIL FOR YOUR ANSWERS.

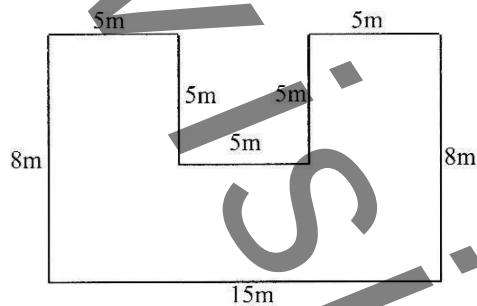
1 30 157
 + 11 028

- A 41 258
- B 41 185
- C 40 185
- D 39 185

2 Find the sum of K469.32 and K321.03.

- A K790.35
- B K780.35
- C K148.39
- D K148.29

3 The diagram below shows a plan of a house.



Find the perimeter of the plan.

- A 60m
- B 56m
- C 46m
- D 41m

4 896 457
 - 473 681

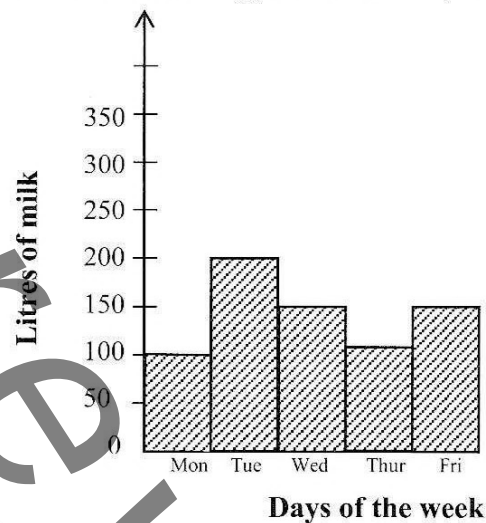
- A 423 876
- B 423 776
- C 422 876
- D 422 776

5 Find the sum of 718 624 and 137 392.

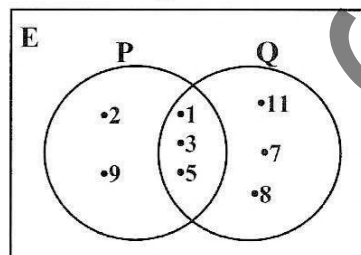
- A 855 016
- B 855 916
- C 856 016
- D 856 916

- 6 Express $\frac{3}{4}$ as a decimal.
- A 0.00075
 - B 0.0075
 - C 0.075
 - D 0.75
- 7 $85\text{kg} + 6\text{kg} + 27\text{kg} =$
- A 172kg
 - B 162kg
 - C 118kg
 - D 108kg
- 8 The smallest number that can be written using the digits 0, 1, 2, 3 and 4 is ...
- A 10 234.
 - B 10 243.
 - C 10 324.
 - D 10 432.
- 9 Town A received 435 540 bags of fertilizer and town B received 187 225 bags of fertilizer. How many bags of fertilizer did the two towns receive altogether?
- A 622 765
 - B 612 765
 - C 522 765
 - D 512 765
- 10 What is the place value of 2 in the number 623 409?
- A Ten thousands
 - B Thousands
 - C Hundreds
 - D Tens
- 11 The symbol ">" means ...
- A is greater than.
 - B is less than.
 - C is equal to.
 - D is greater than or equal to.
- 12 $1000.87 - 213.16 =$
- A 783.71
 - B 787.71
 - C 793.71
 - D 797.71

- 13 The graph below shows the amount of milk supplied to a hotel in five days. How many litres of milk were supplied on Monday and Tuesday altogether?



- A 100 litres
 B 150 litres
 C 200 litres
 D 300 litres
- 14 Look at the diagram below.



How many members are in the intersection set?

- A 8
 B 5
 C 3
 D 2
- 15 $1.475 + 2.28 =$
 A 1.693
 B 1.703
 C 3.655
 D 3.755
- 16 The average age of three boys is 10. If the first boy is 5 years and the second boy is 10 years old, find the age of the third boy.
 A 30 years
 B 25 years
 C 15 years
 D 10 years

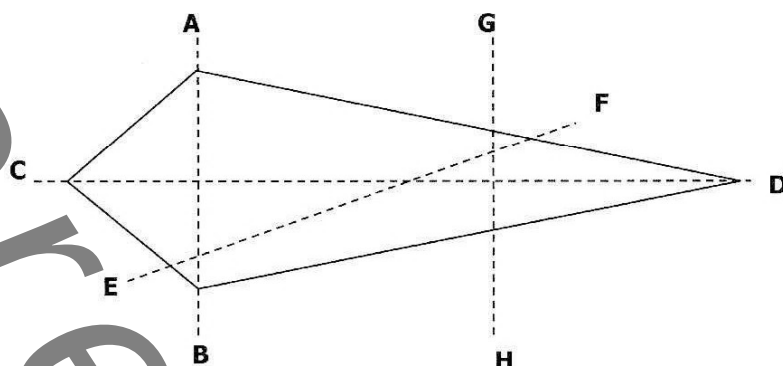
17 $3\ 4\ 2\ 5$

$$\begin{array}{r} \times 12 \\ \hline \hline \end{array}$$

- A 41 100
B 41 000
C 14 100
D 11 400
- 18 The difference between 6 051 and 2 193 is ...
A 3 858.
B 3 868.
C 3 958.
D 3 968.
- 19 If $45 + y = 52$, then y equals ...
A 97.
B 17.
C 13.
D 7.
- 20 Find the total cost of 2 packets of sugar at K8.00 per packet.
A K16.00
B K10.00
C K6.00
D K4.00
- 21 Write 20% as a decimal.
A 0.02
B 0.2
C 20.0
D 200.0
- 22 Martha got $\frac{30}{40}$ in a Mathematics test. Express this mark as a percentage.
A 75%
B 50%
C 25%
D 20%
- 23 Multiply 50.45 by 25.
A 1 262.18
B 1 261.25
C 50.70
D 50.20

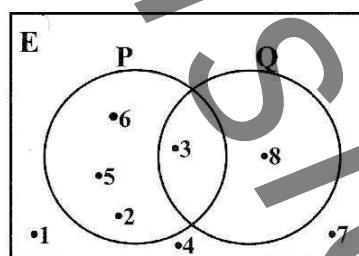
- 24 $K2.50 + K204.50 + K45.00 =$
- A K241.00
 - B K242.00
 - C K251.00
 - D K252.00
- 25 A boy drew 15.3 litres of water in the first trip and another 17.8 litres of water in the second trip from a well. How many litres of water altogether did the boy draw?
- A 22.1 litres
 - B 23.1 litres
 - C 32.1 litres
 - D 33.1 litres
- 26 Write nine hundred nineteen in Roman numerals.
- A CMXIX
 - B MCXIX
 - C MCXXI
 - D CMXXI
- 27 Add 46.345, 133.02 and 1.113.
- A 170.478
 - B 179.478
 - C 180.478
 - D 200.478
- 28 John takes 6 hours to cover a distance of 240km from his home to town. What is his average speed?
- A 34km/h
 - B 40km/h
 - C 234km/h
 - D 246km/h
- 29 When a is added to 13, the answer is 30. What is the value of a ?
- A 33
 - B 30
 - C 17
 - D 13
- 30 $110.42 \text{ metres} - 20.28 \text{ metres} =$
- A 190.14 metres
 - B 130.70 metres
 - C 90.24 metres
 - D 90.14 metres

- 31 In the diagram below, the horizontal line is ...



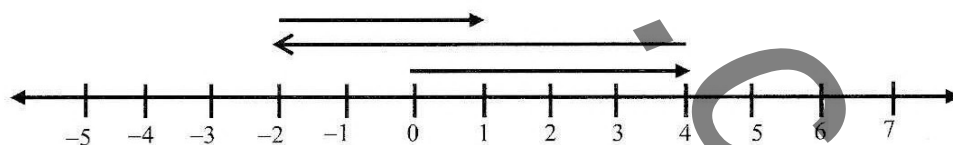
- A AB.
- B CD.
- C GH.
- D EF.

- 32 In the Venn diagram below, the number of elements in set **P** is ...



- A 8.
- B 5.
- C 4.
- D 3.

- 33 The number line below shows ...



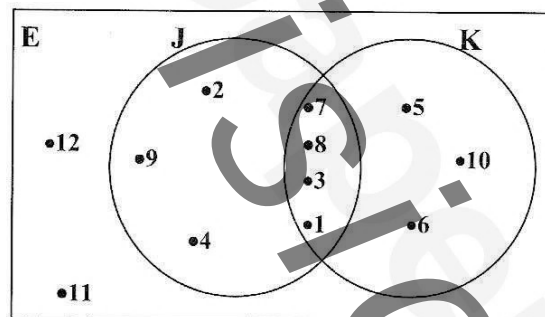
- A $-4 + (-6) + (+3) = +1.$
- B $+4 + (-6) + (+3) = +1.$
- C $+4 + (-6) + (-3) = +1.$
- D $-4 + (+6) + (-3) = +1.$

- 34 The diagram below shows how children travelled to school on one day.

Transport	
Truck	
Car	
Bus	
Bicycle	

If  represents two children, how many children used a bus to travel to school?

- A 12
B 8
C 6
D 4
- 35 The union set of set J and set K is ...



- A {1, 3, 7, 8}.
B {1, 2, 3, 4, 5, 6, 7, 8, 9}.
C {1, 2, 3, 4, 5, 6, 7, 8, 10}.
D {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}.

36 $7\frac{1}{2} - 3\frac{1}{3} =$

- A $4\frac{5}{6}$
B $4\frac{1}{6}$
C $10\frac{1}{6}$
D $10\frac{5}{6}$

37 340 textbooks were shared equally among 10 schools. How many textbooks did each school receive?

- A 3 400
- B 350
- C 330
- D 34

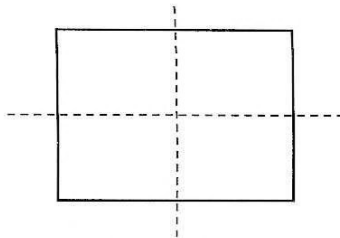
38 6 boxes of wool cost K180.00. How much will 4 boxes of the same type of wool cost?

- A K30.00
- B K45.00
- C K120.00
- D K270.00

39 Mary took 10 small stones every day and left them at school. How many stones did she take to school in 30 days?

- A 20
- B 30
- C 40
- D 300

40 The dotted lines in the shape below are called ...



- A horizontal lines.
- B parallel lines.
- C symmetry lines.
- D vertical lines.

41 $174.69\text{kg} \div 9 =$

- A 19.67kg
- B 19.41kg
- C 18.31kg
- D 10.67kg

42 The ratio of men, women and children in a village of 120 people is 3 to 2 to 1, respectively. How many children are in the village?

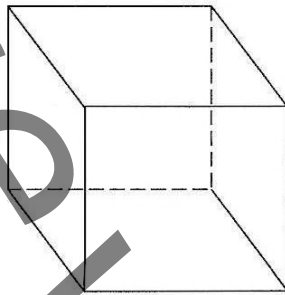
- A 20
- B 40
- C 60
- D 80

- 43 A bicycle was bought at K350.00 and later sold at K450.50. What was the profit?
- A K100.00
 - B K100.50
 - C K800.00
 - D K800.50
- 44 If the average of 4 numbers is 125, find the sum of the numbers.
- A 500
 - B 490
 - C 129
 - D 121
- 45 Which of the symbols below is used for intersection of sets?
- A $\subset$
 - B $\notin$
 - C $\cap$
 - D $\cup$
- 46 A group of boys had 23 guavas altogether. They ate y guavas and remained with 18. How many guavas did they eat?
- A 41
 - B 25
 - C 15
 - D 5
- 47 Express the ratio 120kg to 85kg in its simplest form.
- A 17 to 24
 - B 1 to 35
 - C 24 to 17
 - D 35 to 1
- 48 Which symbol can be put in the box to make the sentence below true?
- $-120 \boxed{} 1$
- A $>$
 - B $<$
 - C $\geq$
 - D $=$
- 49 $1\,376 \div 32 =$
- A 43
 - B 403
 - C 1\,344
 - D 1\,408

50 $756_{\text{eight}} - 127_{\text{eight}} =$

- A 625_{eight}
- B 626_{eight}
- C 627_{eight}
- D 637_{eight}

51 The diagram shown below has ...

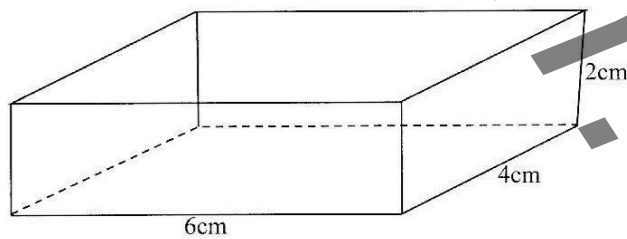


- A 6 edges.
- B 6 faces.
- C 6 corners.
- D 6 vertices.

52 A man bought a packet of sugar at K11.00, a loaf of bread at K4.50 and a packet of milk at K3.75. How much did he spend altogether?

- A K8.35
- B K9.25
- C K18.25
- D K19.25

53 Find the volume of a rectangular prism measuring 6cm long, 4cm wide and 2cm high.



- A 48cm^3
- B 36cm^3
- C 32cm^3
- D 24cm^3

54 $\frac{4}{5}$ written as a percentage is ...

- A 10%.
- B 20%.
- C 40%.
- D 80%.

55 A class library has 19 books. Write this number in base 5.

- A 19_{five}
- B 24_{five}
- C 34_{five}
- D 43_{five}

56 $\frac{2}{5} + \frac{1}{3} =$

- A $\frac{2}{15}$
- B $\frac{3}{8}$
- C $\frac{1}{2}$
- D $\frac{11}{15}$

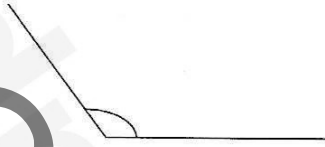
57 8 men can do a piece of work in 12 days. How long will it take 12 men to do the same work?

- A 20
- B 18
- C 8
- D 4

58 Find the area of a rectangular piece of land which is 100m long and 49m wide.

- A 49m^2
- B 149m^2
- C 490m^2
- D 4900m^2

59 The angle shown below is called ...



- A an acute angle.
- B a right angle.
- C an obtuse angle.
- D a straight angle.

Mr Mwamba spent K10.00 out of K50.00. What fraction of the money did he remain with?

- A $\frac{1}{5}$
- B $\frac{4}{5}$
- C $\frac{2}{5}$
- D $\frac{7}{10}$

STOP! PLEASE GO BACK AND CHECK YOUR WORK.