THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
PRIMARY SCHOOL LEAVING EXAMINATION

04E

MATHEMATICS

Time: 2:00 Hours **Wednesday, 19th September 2012 a.m**

Instructions

1. This paper consists of **fifty (50)** questions in sections A, B and C.
2. Answer **all** the questions in each section.
3. Read all the given instructions in the **special answer sheet (OMR)** and fill in all the required information.
4. Write your **Examination Number** and then **shade** it in your answer sheet.
5. Show clearly all the working in each question and **shade** a letter of the correct answer in the answer sheet provided. If the correct answer is A you will shade as follows:

6. If you have to change your answer, you must rub out the shading **very neatly** before shading the new one. Use a **clean rubber.**
7. Use **HB pencil** only.
8. Cellular phones and calculators are **not allowed** in the examination room.

SECTION A: MATHEMATICAL OPERATIONS

For each of questions 1 – 25, work out the answer, then choose the correct option and **shade** its corresponding **letter** in the answer sheet provided.

NO	QUESTION	WORKING SPACE
1.	19,728 – 10,839 = A 8,889 B 9,889 C 9,899 D 9,989 E 9,999.	
2.	3,750 ÷ 15 = A 205 B 250 C 25 D 2.50 E 2,050.	
3.	$3\frac{1}{5} \div \frac{4}{5} =$ A $\frac{16}{5}$ B $3\frac{4}{25}$ C $\frac{16}{25}$ D $2\frac{14}{25}$ E 4.	
4.	−0.822 − 0.349 = A 1.161 B −1.171 C −1.161 D −0.171 E 1.171.	
5.	8.113 × 1.93 = A 15.64509 B 15.68709 C 15.65809 D 15.65709 E 15.65609.	
6.	13789 – (6097+7906) = A -214 B -213 C -204 D 213 E 214	

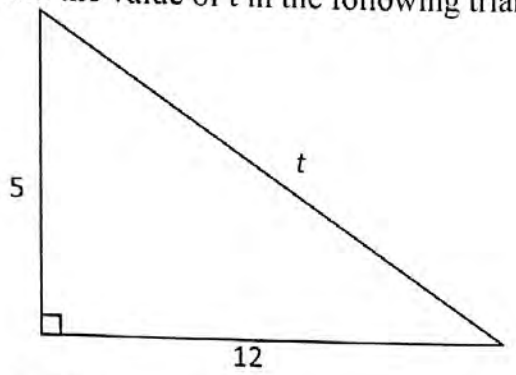
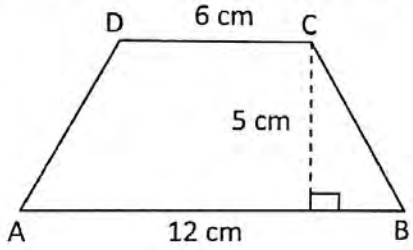
NO	QUESTION	WORKING SPACE
7.	$5\frac{3}{5} - 1\frac{2}{3} =$ A $4\frac{1}{15}$ B $4\frac{1}{2}$ C $3\frac{1}{15}$ D $4\frac{14}{15}$ E $3\frac{14}{15}$.	
8.	$1\frac{1}{2} + 3\frac{1}{2} + \frac{3}{8} =$ A $4\frac{5}{12}$ B $5\frac{1}{4}$ C $5\frac{3}{8}$ D $5\frac{5}{8}$ E $4\frac{3}{8}$.	
9.	$(^{-}2) - (^{-}17) =$ A 16 B $^{-}19$ C $^{+}15$ D $^{-}15$ E $^{+}19$.	
10.	$0.427 \div 0.07 =$ A 6.10 B 61.0 C 0.61 D 0.061 E 610.	
11.	$287 \times 35 =$ A 7,415 B 9,945 C 10,045 D 9,045 E 10,015.	
12.	$6{,}879 + 926 + 68 + 9 =$ A 7,882 B 6,782 C 6,852 D 7,782 E 7,852.	
13.	Calculate $2^2 \times 641$ and then write the answer into Roman numbers. A MMDCLXIV B MMDLXIV C MMCDLXIV D MMLDXIV E MMDLIXV.	

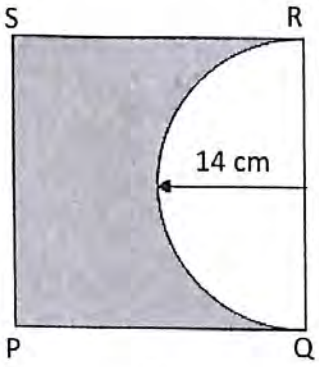
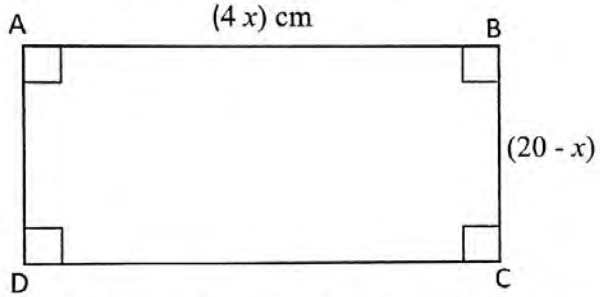
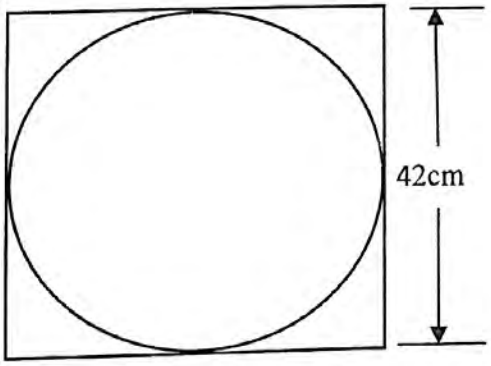
NO	QUESTION	WORKING SPACE
14.	Multiply the square roots of $1\frac{18}{32}$ and $11\frac{1}{9}$. A $2\frac{1}{2}$ B $2\frac{1}{12}$ C $3\frac{5}{6}$ D $11\frac{18}{288}$ E $4\frac{1}{6}$.	
15.	Write the answer for $\left(\frac{20.2}{10^2} \div \frac{1}{2}\right)$ into a simplified fraction. A $\frac{101}{25}$ B $\frac{202}{500}$ C $\frac{404}{1,000}$ D $\frac{101}{250}$ E $\frac{404}{100}$.	
16.	How many prime numbers are there between 10 and 20? A 3 B 5 C 6 D 4 E 7.	
17.	Find the product of $\frac{15}{16}$ and $\frac{20}{21}$. A $\frac{25}{28}$ B $\frac{63}{64}$ C $\frac{64}{63}$ D $\frac{35}{37}$ E $\frac{25}{24}$.	
18.	The Least Common Multiple (L.C.M) of 42, 45 and 150 is A $2\times3\times5\times7$. B $2^2\times3\times5^2\times7$ C $2\times3^2\times5\times7$ D $2\times3^2\times5\times7^2$ E $2\times3^2\times5^2\times7$	
19.	Divide 248 kg 640 gm by 32. A 77 kg 70 gm B 7770 kg 0 gm C 777 kg 0 gm D 7 kg 770 gm E 7 kg 777 gm.	

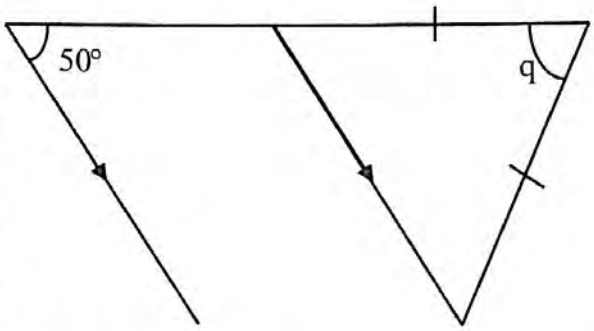
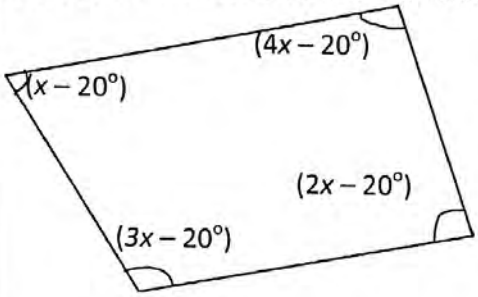
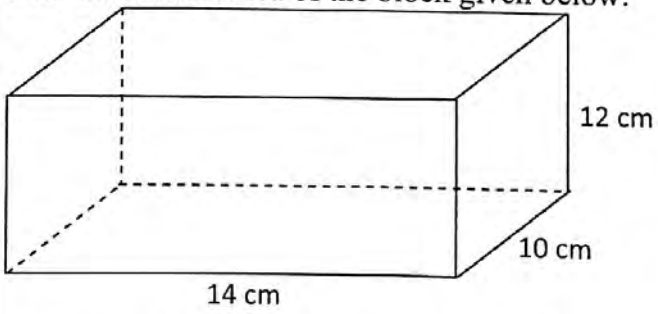
NO	QUESTION	WORKING SPACE
20.	What number should be added to $\left(\frac{5}{2}+\frac{5}{4}\right)$ to get $\frac{1}{8}$? A 3 B $2\frac{3}{4}$ C $3\frac{5}{8}$ D $3\frac{1}{2}$ E $-3\frac{5}{8}$.	
21.	Change $\frac{0.6}{0.96}$ into percentage. A 625% B 62.5% C 6.25% D 0.0625% E 0.625%.	
22.	If $A=-1$ and $B=-2$, the value of x in $\frac{(A+B)(A-B)}{9}=\frac{1}{x}$ is A -3 B $\frac{1}{3}$ C 3 D $\frac{3}{9}$ E $-\frac{1}{3}$	
23.	$11(p+q)-3(p-q)$ is the same as A $8p-14q$ B $8p+14q$ C $14p-14q$ D $14q--8p$ E $-8p-14q$	
24.	Round off 85,996 to the nearest hundreds. A 85,900 B 85,990 C 85,000 D 86,000 E 80,000.	
25.	$(0.5^2-0.25^2)\div(0.5-0.25)$ is the same as A $\frac{1}{16}$ B $\frac{1}{8}$ C $\frac{1}{4}$ D $\frac{1}{2}$ E $\frac{3}{4}$.	

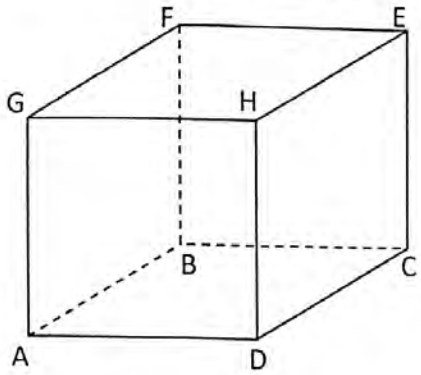
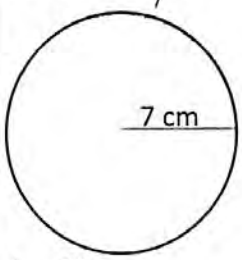
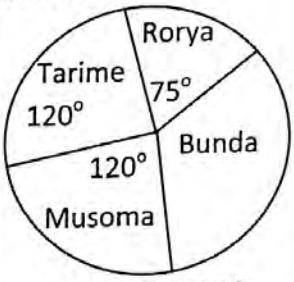
SECTION B: FIGURES

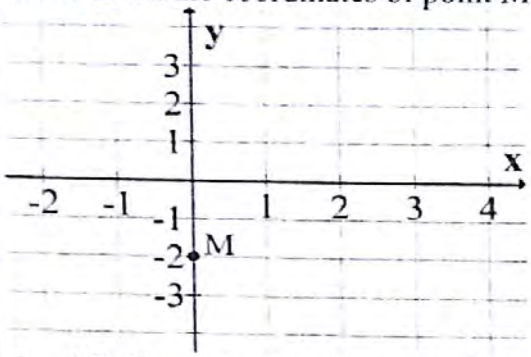
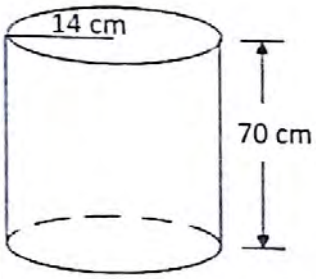
For each of questions 26 – 38, work out the answer, then choose and **shade** its corresponding **letter** in the answer sheet provided.

NO	QUESTION	WORKING SPACE
26.	Find the value of t in the following triangle:  A 25 B 144 C 13 D 169 E 17.	
27.	Find the area of the trapezium ABCD.  A 60 cm^2 B 72 cm^2 C 45 cm^2 D 30 cm^2 E 90 cm^2.	

NO	QUESTION	WORKING SPACE
28.	Find the area of the shaded part if PQRS is a square. (Use $\pi = \frac{22}{7}$).  A $476\ cm^2$ B $784\ cm^2$ C $616\ cm^2$ D $308\ cm^2$ E $196\ cm^2$.	
29.	Find the area of the following rectangle ABCD if its perimeter is 100 cm.  A $336\ cm^2$ B $400\ cm^2$ C $100\ cm^2$ D $10\ cm^2$ E $40\ cm^2$.	
30.	Find the difference between the circumference of the circle and the perimeter of the square in the following figure. (Use $\pi = \frac{22}{7}$)  A 36 cm B 66 cm C 132 cm D 168 cm E 378 cm	

NO	QUESTION	WORKING SPACE
31.	Find the value of q in the following figure:  A 80° B 50° C 130° D 65° E 40°.	
32.	Determine the value of x in the following figure:  A 20° B 28° C 44° D 88° E 50°.	
33.	Find the surface area of the block given below:  A 716 cm^2 B 428 cm^2 C 756 cm^2 D 736 cm^2 E 856 cm^2	

NO	QUESTION	WORKING SPACE
34.	Find the volume of the following cube if the surface area of ABCD is 144 cm^2.  A 12 cm^3 B 144 cm^3 C 10,648 cm^3 D 1,728 cm^3 E 512 cm^3.	
35.	Find the circumference of the following circle. (Use $\pi = \frac{22}{7}$).  A 44 cm B 88 cm C 176 cm D 616 cm E 166 cm.	
36.	The following pie chart shows the amount of money from Primary Education Development Plan that was distributed to four districts; Rorya, Bunda, Musoma and Tarime in Mara region. If a total of shs 10,000,000 was distributed to the districts, how much money did Bunda district receive?  A shs 1,250,000 B shs 2,083,333 C shs 3,333,333 D shs 8,750,000 E shs 1,350,000.	

NO	QUESTION	WORKING SPACE
37.	Write down the coordinates of point M.  A (-2, 0) B (-2, 1) C (0, -2) D (-2, -2) E (-2, -1).	
38.	Find the area of the following closed cylinder. (use $\pi = \frac{22}{7}$)  A 1,232 cm^2 B 6,776 cm^2 C 616 cm^2 D 6,160 cm^2 E 7,392 cm^2.	

SECTION C: WORD PROBLEMS

For each of questions 39 – 50, work out the answer, then choose the correct option and **shade** its corresponding **letter** in the answer sheet provided.

NO	QUESTION	WORKING SPACE
39.	Ntubi is 12 km North of Bugando hospital and Sakina is 9 km on the East side of the hospital. Find the distance between them. A 15 km B 19 km C 25 km D 3 km E 21 km.	
40.	Juma and Roza shared sh 15,000 in the ratio 11:4 respectively. How much money did Roza get? A sh 9,000 B sh 10,000 C sh 5,000 D sh 11,000 E sh 4,000.	
41.	Kazimoto has 122 kilograms and 952 grams of maize while his brother has 348 kilograms and 370 grams of maize. How many grams of maize do they have altogether? A 471,322 B 460,222 C 460,322 D 470,222 E 461,322.	
42.	The product of 12 and another number is twice the sum of 20 and the number. Find the number. A 8 B 6 C 4 D 2 E 5.	
43.	Jumanne gave $\frac{2}{10}$ of kilograms of rice to his young brother and $\frac{1}{10}$ to his uncle. If he remained with 14 kg, how many kilograms did he had before? A 10 B 20 C 14 D 22 E 30.	

NO	QUESTION	WORKING SPACE
44.	The average of five numbers is 42. If the first four numbers are 48, 54, 18 and 60, what is the fifth number? A 35 B 50 C 29 D 30 E 40.	
45.	Masingija went for shopping with shs 20,000 and bought the following items: 4 kg of flour @ shs 1,000; 6 kg of rice @ shs 1,200 and 6 bottles of soft drinks @ shs 400. How much money did she left with after buying all these items? A shs 13,600 B shs 6,400 C shs 12,600 D shs 7,600 E shs 7,400.	
46.	Find the cost of sending a telegram of 34 words, if the first 20 words cost shs 900 and shs 70 for each extra word. A shs 1,400 B shs 2,380 C shs 980 D shs 1,480 E shs 1,880.	
47.	The shop of Juakali opens at 0900 and closes at 1730 everyday. How many hours does Juakali take to sell the goods in his shop for 2 days? A 16.0 B 16.60 C 17.0 D 8.5 E 24.0	
48.	A large bottle of medicine has 425 liters 600 milliliters. If the medicine is put into 70 small bottles of the same size, what amount of milliliters shall each bottle possess? A 1,860 B 4,680 C 5,806 D 6,080 E 6,608	

NO	QUESTION	WORKING SPACE
49.	The children coughing medicine in a bottle has 630 milliliters before being used. If the child will use 10 milliliters 3 times a day, how many weeks shall that medicine be used? A 1 B 2 C 3 D 4 E 5	
50.	Kakulima deposited sh 760,000 in a bank which offers an interest rate of 20% per year. Find the interest which he got after nine months. A shs 124,000 B shs 132,000 C shs 154,000 D shs 114,000 E shs 152,000.	