KCPE 2005

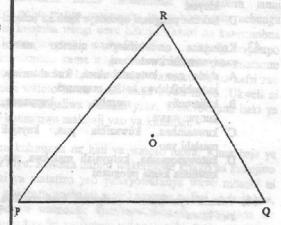
MATHEMATICS

- 1. Which one of the following is 50205082 in words?
 - Fifty million two hundred and fifty thousand and eighty two.
 - B. Fifty million twenty five thousand and eighty two.
 - C. Fifty million two hundred thousand five hundred and eighty two.
 - D. Fifty million two hundred and five thousand and eighty two.
- What is the place value of the digit 6 in the number 2649053?
 - A. Hundred thousands
 - B. Millions
 - C. Six hundred thousand
 - D. Ten thousands
- 3. What is the number 29-34046 rounded off to the nearest thousandth?
 - A. 29-3
 - B. 29-34
 - C. 29.340
 - D. 29-341
- 4. What is the smallest number that can be divided by 12, 18 and 27 without a remainder?
 - A. 108
 - B. 36
 - C. 3
 - D. 5832
- 5. A shopkeeper bought 30 eggs. He then sold each egg at ah 6, making a profit of 20%. How much had he paid for the eggs?
 - A. .sh 144
 - B. sh 150
 - C. sh 180
 - D. sh 216
- 6. What is the value of $8 + 0.02 + 1.35 \times 0.47$
 - A. 400-54
 - B. 40-54
 - C. 160-54
 - D. 405-4 alci zao avinei na zinatas kutambe
 - 7. The marked price of a blouse was sh 750. Halima bought five such blouses after being given à 10% discount. How much did the try for the five blouses?
 - A. sh 3 675
 - B. sh 675
 - C. sh 3 375
 - D. sh 3 700

- 8. Katua bought the following items from a kiosk:
 - 2 kg of rice for sh 152
 - 1 kg of meat @ sh 160
 - 2 loaves of bread @ sh 23

What balance did he receive if he paid for the items using a sh 1000 note?

- A. sh 438
- B. sh 562
- C. sh 410
- D. sh 665
- In the figure below, RPQ is a triangle. Point O is inside the triangle. Join RO, PO and QO.



What is the size of the obtuse angle POQ?

- A. 54°
- B. 114°
- C. 120°
- D. 126°
- 10. The ages, in years, of 10 pupils in a class are: 16, 18, 15, 14, 17,-16, 14, 13, 19 and 14. What is the median age of the pupils?
 - A. 16-5
 - B. 15-6
 - Corl4 melazana innatim maramali O
 - D. 15-5
- 11. Which one of the following statements is true about all quadrilaterals?

Special and the vanspotale meader

- A. Opposite sides are equal.
- B. Diagonals bisect at right angles.
- C. Sum of interior angles is 360°.
- D. Angles are right angles.

The juice is then How many such or	hume I cubic metre poured into five- ontainers are used?	litre containers.	16. Which on open cube		is the correct net
A. 2 B. 200	1000	E . E	A. [25 25	EGTH LED STA
C. 2000		1. 1		(15) E	- 10 ALE
D. 200 000	de woled side; seT	20.			
13. A road is represen	nted by a length o	of 3.2 cm on a	SUDDEN SEEL SEEL SEEL SEEL SEEL SEEL SEEL SE	de, not blos as	w xling to mail an
map. What is th	e actual length o	of the road in	and of the sta	25 b 25 miles	a anna maga cara
A. 0-16	cale used is 1:50 00	or.		satisanT an sa	I on Thursday U
D: 16	Not reporting 40				
C. 10					8 2
D. 160					- 1 M
14. In the triangle K	LM drawn below,	construct the	The state of	111112	\ III 3
perpendicular bisec	ctor of line KM to	cut line KM at	H synh Si ad	NAT CONTRACTOR	
N and line KL at 1	· iner in the long	and 22 on 1945	ob or an eatin		istoch workun e Sone more work
	M	con high Venus	C.		The se de fact
	A 120 CT		The same		UR? - 0k :
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17. The table below represents the sales of milk in litres by a vendor in five days. The sale for Thursday is not shown.

DAYS	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
NUMBER OF LITRES	25	19	23 14 /3 8	mari @ sli 160	22 00

One litre of milk was sold for sh 25. The vendor got a total of sh 2 925 for the sale of milk during the five days. How many more litres of milk did the vendor sell on Thursday than on Tuesday?

- 28 B. 47
- C. D. 117
- 18, Sixteen workers can dig a field in 12 days. How many more workers are required so as to do the work in 8 days?
 - A. 40
 - B. 24
 - C. 8
 - D. 10
- 19. The top of a ladder, 26 metres long, leans on a vertical wail. The ladder touches the wall at a height of 10 metres. What is the horizontal distance from the bottom of the ladder to the walt?
 - A. 16 m
 - 18 m B.
 - 24 m C.
 - D. 576 m
- The table below shows for adults.

20. The table below shows the postal rates for sending a money order.

VALUE OF ORDER (in sh)	COMMISSION
Not exceeding 500	sh 42
501- 1 000	(S) (Sh 114
1 001- 3 000	sh 174
3 001- 5 000	ala 209
5 001-10 000	sh 295
10 001-20 000	sh 441
20 001-30 000	sh 617

School fees for two children in the same school was sh 9 400 and sh 11 800. The father bought one money order to pay the total amount of fees. How much more would he have spent had he bought two separate money orders for the fets?

- A. sh 119
- B. sh 146
- C. sh 736
- D. sh 617
- 21. What is the next number in the pattern 1, 3, 7, 15, ...?
 - A. 22
 - B. 23

31

C. 25

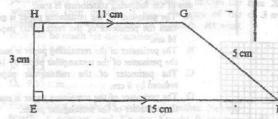
Sagana-Nanyuki	Trate	IREE		344
				D.
1.00			-	SECTION AND PERSONS NAMED IN

STATION	NANYUKI	NARO MORU	KIGANIO	KARATINA	SAGANA
NANYUKI	-	20	35	55	70
NARO MORU	20	atter bring sivi	20	D:35	50
KIGANJO	35	ZV		11. W 20 a cris o	35
KARATINA	55	35 .	20	A Chroses	20
SAGANA	70	50	35	20	TERRES AND

The fare for children is half that of adults. Taipei and his two children travelled from Nanyuki to Sagana. On their return journey they first paid the fare to Karatina. They later paid the fare to Nanyuki. How much more money did they spend on travel for their return journey?

- A. sh 150
- B. sb 140
- C. sh 15

23. The figure below is a trapezium. Lines HG = 11 cm, GF = 5 cm, EF = 15 cm and HE = 3 cm. Line EF is parallel to HG and angle FEH = angle EHG = 90°.



What is the area of the figure?

- B. 39 cm²

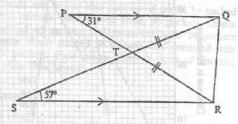
 - C. 65 cm²
 - D. 75 cm²
- 24. A rectangular container 45 cm long and 25 cm wide was full of water. After removing 22.5 litres of the water, the level of water became 4 cm high. What was the height of the container?
 - A. 24 cm
 - B. 20 cm
 - C. 16 cm
 - D. 6 cm
- 25. Nekesa has p pencils. Rhoda has 3 more pencils than Nekesa. Karani has two pencils less than the total number that Nekesa and Rhoda have. How many pencils do they have altogether?
 - A. 8p-2
 - B. 4p+4
 - C. 2p+1
- 26. Cherono spent sh 8 100 on food in May. In the month of June she spent 10% less on food than in May. How much money did she spend on food in June?

A. 166 cm²

- A. sh 810
- B. sh 7 290
- C. sh 9 000
- D. sh 8 910
- 27. Amina shared money among her three children. The first got $\frac{1}{3}$ while the second got $\frac{1}{4}$ of the money. The third got 1 of what remained. Amina was left with sh 1 500. How much money had she before it was shared?
 - A. sh 3 000 B. sh 5 700

 - C. sh 7 200
 - D. sh 3 600

- 28. A motorist travelling at an average speed of 84 km/h took 2 hours and 30 minutes to travel from town M to town N. She then took 3 hours and 20 minutes to travel back to town M. What was the average speed for the whole journey?
 - A. 36 km/h
 - B. 63 km/h
 - C. 73 km/h
 - D. 72 km/h
- 29. In the figure below, line PQ is parallel to line SR and QT is equal to TR. Angle QPT = 31° and angle TSR = 57°.



What is the size of angle PQR?

- A 46° R 880
- C. 103°
- D. 92° 00.9
- 30. The charges for sending a telegram were as follows:

The first 10 words or less sh 15.

Any additional words sh 1-50 each.

Abbreviations and punctuation marks are counted as words.

A tax of 20% is charged on the amount.

The total amount to be paid is rounded off to the nearest 50 cents. What was the cost of sending the following telegram?

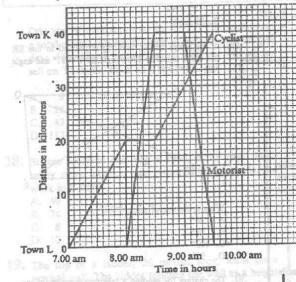
JOHN MLAMA P.O. BOX 360 NYERI GOING TO KISUMU AFTER THE EXAMINATION KOIGI

while another packs 375 one-i

- B. sh 24
- C. sh 28-80 white-new Get salved selfdoor A . E.E.

31. Below is a travel graph showing the journey of a motorist travelling from town L to town K and back, and that of a cyclist travelling from town L to town K.

took 2 hours and 30 minutes to travel from town M



How far from town L was the cyclist when he met the motorist travelling back to town L?

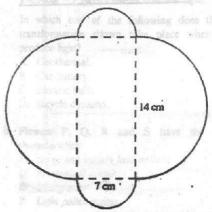
- A. 40 km date 02-1-fig above tasobibbs vnA
- B. 32 km nodenhang bas
- C. 20 km
- D. 7 8 km ms of no begreed at ma 8 co. A
- 32. What is the value of $\frac{1}{3}(2x+4y^2)+5p-8$ when p=6, x=2p and $y=\frac{1}{2}x-1$?
 - A. 130
 - B. 631
 - C. 431
 - D. 362
- 33. A machine packs 250 two-kilogram packets of sugar while another packs 375 one-kilogram packets each day. H w many tonnes of sugar altogether, do the two machines pack in five days?
 - A. 0-875
 - B. 3-125
 - C. 4-375
 - D. 6-25

- 34. A square of side 2 cm is cut from each corner of a rectangular paper measuring 3 cm by 12 cm. Which one of the following statements is true?
 - A. The perimeter of the remaining paper is greater than the perimeter of the rectangular paper by 16 cm.
 - B. The perimeter of the remaining paper is less than the perimeter of the rectangular paper by 16 cm.
 - C. The perimeter of the rectangular paper is reduced by 8 cm.
 - D. The perimeter of the remaining paper is equal to the perimeter of the rectangular paper.
- 35. A salesman is paid a salary of sh 1 500 per month plus a commission of $2\frac{1}{2}\%$ on the sale of goods above sh 10 000. In one month he was paid a total of sh 1 800. How much was the sale of the goods?
 - A. sh 300 B. sh 12 000
 - C. sh 22 000-
 - D. sh 82 000
- 36. In a group of 126 spectators the ratio of men to women was 3:4. What is the new ratio if 2 more men and 8 more women joined the group of spectators?
 - A. 7:1
 - B. 5:12
 - C. 13:16
 - D. 1:4
- 37. A clock was set on Monday at 8.30 a.m. On Tuesday, the following day, the clock showed 8.45 p.m. when the correct time was 8.30 p.m. How many minutes was the clock gaining in every 24 hours?
 - A. 10 minutes
 B. 7½ minutes
 - C. 15 minutes
 - D. 30 minutes
- 38. The base of a closed cuboid measures 4 cm by 5 cm and the height is 7 cm. The base and the top parts of the cuboid are painted. What is the total surface area of the parts which are not painted?
 - A. 166 cm²
 - B. 126 cm²
 - C. 63 cm²
 - D. 40 cm²
- 39. During an election the winning candidate got 0-425 of the votes cast while the other two candidates got 0-39 and 0-183 respectively. There were 48 spoilt votes. How many votes did the winning candidate get?

B. sh 3.700

- A. 24 000
- B. 10 200
- C. 9360
- D. 4392

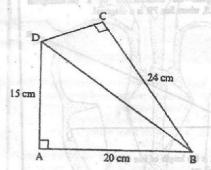
- 40. A motorist started on a journey of 250 km at 6.30 a.m., travelling at an average speed of 100 km/h. After travelling for 150 km, the car got a puncture and it took him 30 minutes to change the wheel. He then continued with the rest of the journey at an average speed of 80 km/h. At what time did he reach his destination?
 - A. 9.15 a.m.
 - B. 9.45 a.m.
 - C. 9.30 a.m.
 - D. 9.55 a.m.
- 41. Four children bought 53 oranges altogether. Nekoye bought x oranges and Kamau bought 9 oranges more than Nekoye. Fatuma bought twice so many oranges as Nekoye. Atieno bought as many oranges as both Kamau and Fatuma bought. Wais voice of the following equations can be used to and the number of oranges Nekoye bought?
 - A. 5x + 22 = 53
 - B. 5x + 18 = 53
 - C. 7x + 9 = 53
 - D. 7x + 18 = 53
- 42. Waithers borrowed sh 10 000 for a period of two years. She was charged compound interest at the rate of 15% per year. How much interest did she pay altogether?
 - A. sh 1 500
 - B. shi 3 000
 - C. sh 3 225
 - D. sh 1 725
- 43. The figure below represents a table mat made up of a rectangle and four semi-circles. The rectangle measures 14 cm by 7 cm.



What is the area of the table mat? Take $\pi = \frac{27}{7}$

- A. 192 cm2
- B. 868 cm²
- C. 290 1 cm2
- D. 1941 cm²

- 44. The cash price of a tractor is 1.8 million shillings. Rotich bought it on hire purchase terms. The total amount he paid was 30% more than the cash price. He paid a deposit of sh 660 000 and the remainder in 24 equal monthly instalments. How much was each instalment?
 - A. sh 70 000
 - B. sh 97 500
 - C. sh 47 500
 - D. sh 25 000
- 45. Omala and Mwite had packets of tea to be packed into cartons. Each carton holds 46 packets. Omala packed 63 cartons and remained with 24 packets while Mwite packed 54 cartons and remained with 19 packets. How many more packets of tea had Omala than Mwite?
 - 419
 - B. 414
 - C. 409
 - D. 5425
- 46. The figure shown below, is formed by two rightangled triangles ABD and BCD.

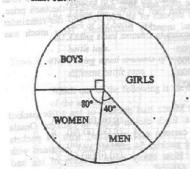


What is the area of the triangle BCD?

- A. 300 cm²
- 180 cm² B.
- C. 84 cm²
- D. 150 cm²

47. The population of a village is represented by the pie

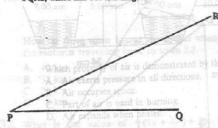
11. The following are the activities which are carried



If there were 300 girls, how many more boys than men were there?

- A. 80
- B. 100
- C. 180
- D. 50

48. Complete the construction of a parallelogram PQRS, where line PR is a diagonal.



DNLY?

What is the length of line QS?

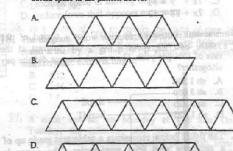
- A. 6.7 cm
- B. 7-0 cm Used policy adjusted and to seem and at 1 C. 3-8 cm Party operated a
- C. 3-8 cm Parm cher
- D. 9-1 cm Factory wastes.

49. Which is the correct order of writing the fractions $\frac{3}{4}$, $\frac{7}{9}$, $\frac{4}{5}$, and $\frac{9}{11}$ from the largest to the smallest? A. The rom wild animals to

- B. 2, 2, 4, 1 lance of nature by 5
- C. 9:1,1,4

to build sparred up in guillevent .m.s. Ot. of a good of E. a water

> Which one of the shapes below would fit in the dotted space in the pattern above?





The mistage made during the construction was A belosing the mouth of the bottle a cds of today. B. using little amount of coloured water