TANZANIA FEZA SCHOOLS

NAME 1-2-3	MARKS
ADMISSION NUMBER	

DATE	QUARTER	EXAM	CLASS	SUBJECT
26TH NOVEMBER, 2016	4	ANNUAL	F-1	MATHEMATICS
TIME	TEACHER(S)			
2 HOURS	MR. EMRE (FB) - MADAM HAZEL (FG)			

QUESTION NUMBER	QUESTION CHOSEN: PUT A TICK (√)	FOR EXAMINER'S USE ONLY	
		MARKS	EXAMINER'S SIGNATURE
1			

INSTRUCTIONS:

1. This paper consists of **TWO (2)** sections.
2. Answer **ALL** questions.

SECTION A

1. (a) Find the number, if the difference between certain number and its $\frac{2}{5}$ is 450.

   (b) Nina takes $\frac{5}{7}$ of an hour to read 50 pages of a novel. How many minutes does she take to read 1 page?

2. Three pieces of string measures 45 dam, 1.4 m and 216 hm. find their total length in km.

3. (a) Express $2.10\dot{5}$ as a fraction.

   (b) Evaluate

$$\frac{\frac{2}{50}+0.56+\frac{84}{50}}{\frac{32}{10}\div\frac{0.64}{0.30}}$$

Give your answer in fraction form.

4. John bought 5 bottles of juice of capacity 250ml. David bought 3 bottles of juice of capacity of 500ml. And James bought 4 bottles of juice of capacity 350ml. Who had more juice to drink? How much more than others?

5. (a) Convert $3\frac{5}{8}$ and $\frac{27}{5}$ into percentage and a decimal.

(b)

dg	cg	mg
7	11	13
x		10

6. Express 7363.09364
   (a) 4 significant figure

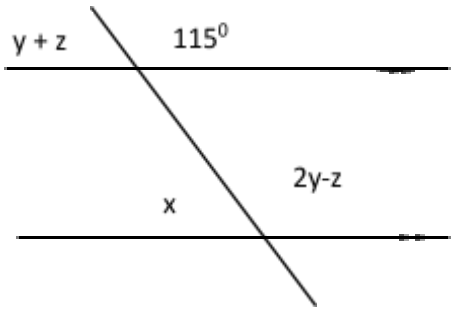
   (b) 7 significant figure

   (c) 2 decimal places

7. From the figure that follows find the value of

(a) $2x - 3y + 2z$

(b)



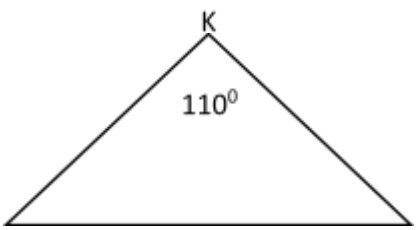
8. Solve the following simultaneous equations by elimination method

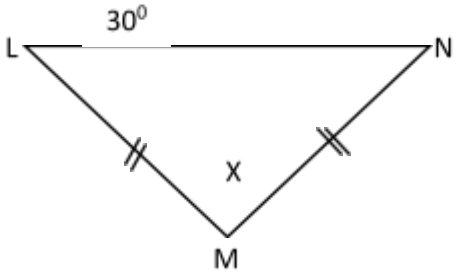
$2x + 5y - 20 = 0$

$4y - 3x + 30 = 0$

9. The sum of two numbers is 79, if one of them is 7 more than five times the others, what are the numbers?

10. In the figure that follows $KN//LM$ and $LM//MN$, find the value of X.





11. Solve the equation $\left| x - 12 + \frac{x}{4} \right| = 8$

12. Solve the following inequality and show the solution on the number line

$$\left| \frac{7 - 3x}{4} \right| > 1$$

13. 20 books were bought at shs. 4500 each. 15 of them were sold at shs. 4000 and the rest was sold at shs. 5000. Find the percentage loss.

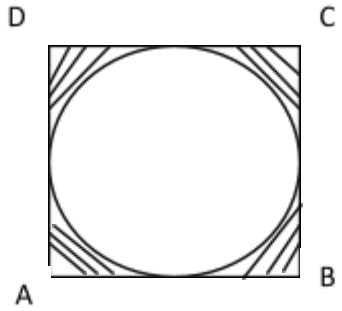
14. (a) If $a : b = 4 : 7$ and $b : c = 8 : 5$, find $a : b : c$

(b) If $x : y : z = 16 : 10 : 15$ find $x : z$

15. (a) Find the equation of a line whose gradient is -3 and x-intercept is $\frac{7}{2}$.

(b) Find y-intercept

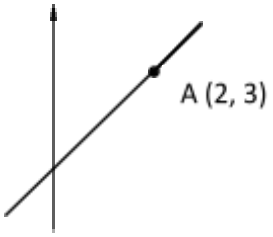
16. ABCD is a square with sides 8cm; find the area of the shaded part.



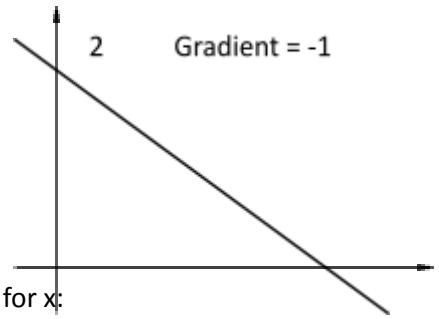
17. If a line ax + by = 50 goes through points (2,3) and (4, 1), fid a - b

18. Find the equation of the lines

(a)



(b)



19. Solve for x:

$$8x - 2(3 - x) = 10 - 3(x + 1)$$

20. If the basic salary of tshs. 150000, increased to tshs. 210,000, what will be the increase percentage of the salary?

SECTION B

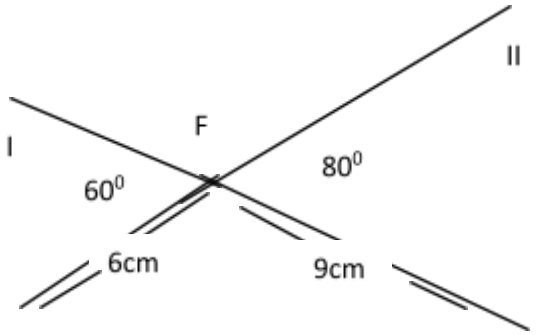
21. If in a regular polygon, the ratio of the degree measure of the interior to exterior angle is 3:2, find the name of this regular polygon.

22. Brighton is 6 years older than his young brother Paul. If ten years ago, the ratio of their age was 9:8, find

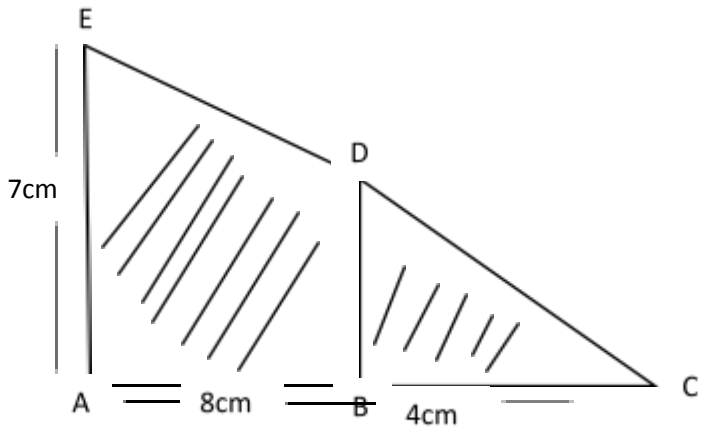
(a) Their present ages

(b) The ratio of their ages after twelve years

23. In the figure F is the centre of both circles. Find the perimeter of this figure



24. In the area of the shaded part is $46cm^2$. Find the length of BD



25. (a) Solve graphically;

$\frac{x}{4}+\frac{y}{3}=2$ and $2x-y=5$

(b) Given that the three points (3, 5), (0, 2) and (m, -3) are on the same line, find the value of m.