

THE PEARL EXAMINATIONS 2025

KAMPALA SCHOOLS

NEW CLASS ENTRY INTERVIEW

PRIMARY SEVEN

MATHEMATICS

Time allowed: 2 hours 30 minutes

Name: _____

School: _____

District: _____ Signature: _____

READ THE FOLLOWING INSTRUCTIONS CAREFULLY:

1. This paper has two sections: **A** and **B**. Section **A** has **20 questions** and section **B** has **12 questions**.
2. Answer **all** questions. All the working for both sections **A** and **B** must be shown in the spaces provided.
3. **All** working **must** be done using a **blue** or **black** ballpoint pen or ink. Any work done in pencil other than graphs and diagrams will **not** be marked.
4. **No calculators** are allowed in the examination room.
5. Unnecessary **changes** in your work and handwriting that cannot be easily read may lead to **loss of marks**.
6. Do not fill anything in the table indicated **"For Examiners' use only"** and the boxes inside the question paper.

FOR EXAMINERS' USE ONLY

Qn. No.	MARKS	EXR'S No.
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1-5		
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6 -10		
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11- 15		
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16 - 20		
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21 - 22		
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23 - 24		
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25 - 26		
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27 - 28		
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29 - 30		
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31 - 32		
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TOTAL		
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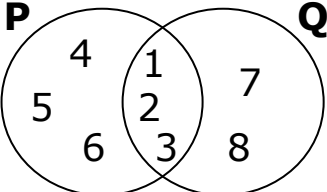
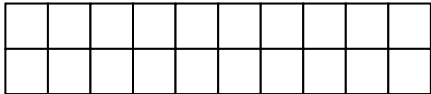
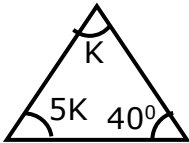
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Please Turn Over

THE PEARL EDUCATIONAL CONSULT KAMPALA SCHOOLS

ALWAYS USE THE PEARL: STANDARD WORK BOOKS, COMPANION BOOKS, HOME WORK , HOLIDAY PACKJAGES, LUNCH HOUR, MORNING WORK, SCHEMES OF WORK @ YOUR SUCCESS IS OUR PRIDE @

SECTION A

1.	Work out : $234 + 89$	2.	Write 40404 in words.
3.	<p>Given sets below.</p>  <p>List the members of $P \cup Q$</p>	4.	A cyclist covered a distance of 240Km at a speed of 80Km /hr, Find the time the cyclist took.
5.	Find the average of $4y$, $3y$ and $8y$	6.	<p>Shade $\frac{3}{5}$ in the diagram below</p> 
7.	Work out the value of 3 in 304_{five} .	8.	Add: $\frac{2}{3} + \frac{2}{4}$
9.	<p>Calculate the value of K in the figure below.</p> 	10.	5 builders take 4 days to complete a wall. How many days will 10 builders take?
11.	If 3 mangoes cost sh. 1800. Find the cost of a 9 similar mangoes.	12.	Increase 15% of sh. 24000

13.	Find the next two numbers in the sequence 1, 4, 9, 16, _____, _____	14.	Simplify: $^{-}3 - ^{-}5$
15.	Write CXXV in Hindu – Arabic numerals.	16.	Work out: $\frac{3}{4} \div \frac{1}{2}$
17.	The product of 2 numbers is 24. If the first number is 8, find the second number.	18.	Use $n(\frac{n+1}{2})$ to find the 20 th triangle number.
19.	Solve for K: $3 - K = 7$	20.	Construct an angle of 450 using a pair of compass a rule and a pencil only.

SECTION B

21.	a) Work out: $\frac{0.06 \times 0.32}{0.8 \times 0.2}$ 3marks	b) Simplify: $\frac{3}{4} - \frac{1}{3} + \frac{1}{2}$ 2marks
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22.	<p>In a class of 70 pupils, 40 pupils like mathematics (M), 35 pupils like English (E) 2P pupils like both subjects and 5 pupils do not like the two subjects.</p>	
	<p>a) Use the above information to complete the Venn diagram below.</p> <div data-bbox="196 327 669 657"> <div> <div>n(M)=40</div> <div>n(E) =35</div> </div> <div>3 marks</div> </div>	<p>b) How pupils like both subjects.</p> <p>2 marks</p>
	<p>c) Find the number of pupils who like English only.</p> <p>1 mark</p>	
23.	<p>a) Increase 200 goats in the ratio of 5:4</p> <p>2 marks</p>	<p>b) Decrease sh. 12000 by $33\frac{1}{3}\%$</p> <p>3marks</p>
	<p>24. A taxi left Mpigi for Masaka via Ssembabule at 7:30am and reached at 11:00am moving at a speed of 70Km/hr.</p>	
	<p>a) How long did the taxi take?</p> <p>2marks</p>	<p>b) What distance did the taxi cover</p> <p>2marks</p>

	c) Convert 7 years to months .		1 mark	
25.	In a class of 120 pupils, $\frac{1}{3}$ of the pupils are boarders and the rest are day scholars.			
	<p>a) What fraction of the pupils are day scholars.</p> <p>b) How many day scholars are in the class.</p>	<p>c) How many more day scholars than boarders are in the class.</p>	<p>1 mark</p> <p>2 marks</p>	
26.	<p>The Venn diagram below shows the prime factors of X and Y. Study it and answer the questions that follow.</p> <div><div><div><div>F_x</div><div><div>2_2</div><div><div>2_1</div><div>5_1</div></div></div><div><div>F_y</div><div>3_1</div></div></div></div><p>a) Find the value of</p><p>i) X</p><p>ii) Y</p></div>			1 mark @
	<p>b) Work out the GCF of F_x and F_y</p>	<p>c) Calculate the LCM of F_x and F_y</p>	<p>2 marks</p> <p>2 marks</p>	

27. a) Change 23_{five} to base ten

2 marks

b) Work:
$$\begin{array}{r} 1 \ 0 \ 0_{\text{five}} \\ + \ 4 \ 4_{\text{five}} \\ \hline \end{array}$$

2 marks

c) Change 23_{ten} to base five

2 marks

28. **The sum of the values in table below is the same vertically horizontally and diagonally. Study and use it to answer the questions that follow.**

16	2	a
b	10	14
8	c	4

a) Find the magic sum

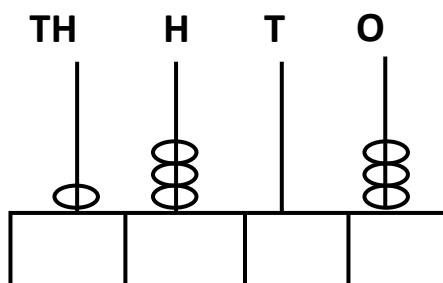
1 mark

b) Fill in the missing values.

3 marks

29. a) **Write the number shown on the abacus.**

1 mark



	b) Expand the number above using values. 2 marks	c) Write the number stated in the abacus in words 2 marks
30.	Okello borrowed sh. 600,000 from the bank which offers an interest rate of 5% per annum.	
	a) Find the interest he will pay after 8 months. 2 marks	b) What amount will he pay to the bank in 8 months 3 marks
31.	Mike and Ben shared 27 mangoes in the ratio of 4:5. Find how many more mangoes did Ben get than Mike. 4 marks	

32. Using a pair of compasses, ruler and a pencil only, construct a regular hexagon whose radius is 4cm

4marks

GOOD WORK