

PRE - PLE TEST SET FIVE

Section A (40 Marks)

Operations on Whole numbers (P.4)

1. Subtract: 346

$$\begin{array}{r} 346 \\ - 114 \\ \hline \end{array}$$

Whole numbers (P.4)

2. What is the place value of 4 in 3462?

Set concepts (P.6)

3. Given that Set $N = \{a, b\}$, list down all the subsets of set N .

Number patterns and Sequences (P.7)

4. Without directly dividing, Prove whether 144 is divisible by 9.

Fractions (P.7).

5. What number comes mid-way between $\frac{1}{3}$ and $\frac{2}{3}$?

Time (P.7) and (P.5)

6. Express 165 minutes as hours.

Angles, lines and geometric figures (P.7)

7. Using a pair of compasses, a ruler and a pencil only, construct an angle of 135° in the space below.

Algebra (P.7)

8. Given that $a = -3$ and $b = 4$, find the value of $a^2 + ab$.

Length, Mass and Capacity (P.7)

9. In the figure below, the perimeter of each small square is 12cm. Find the area of the rectangle ABCD.



Integers (P.7)

10. John will visit the clinic the coming Monday. If that will be after 87 days of his last visit, what day of the week did John last visit the clinic?

Operations on Whole numbers (P.7)

11. Find the number which has been expanded below.

$$(3 \times 10^3) + (8 \times 10^2) + (6 \times 10^{-2})$$

Distance, Speed and Time (P.7)

12. John covered a journey at an average speed of 76 km/h in 150 minutes. How far was John's journey?

Fractions (P.7)

13. In a class, there are 30 boys. The class has 20% more girls than boys. Find the total number of pupils in the class.

Data handling

14. A box contains 25 pens, 13 pens are blue, 6 pens are black and the rest of the pens are red. A pen is picked

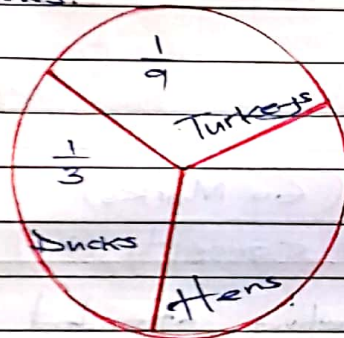
at random from the box. Find the probability that the pen picked is red.

Whole numbers (P.7)

15. Convert 134_{eight} into denary base.

Data Handling (P.7)

16. The circle graph below shows different kinds of poultry birds kept by Mr. Ssemakula. Study it carefully and answer question that follows.



If there are 150 hens kept, how many poultry birds does he have altogether?

Length, Mass and Capacity (P.7)

17. Find the diameter of a circle whose circumference is 4.4 cm. (Take $\pi = \frac{22}{7}$).

Money (P.5)

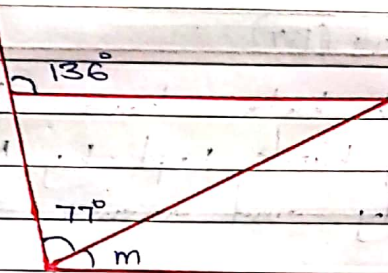
18. Maria bought 160 mangoes at sh 1000 each. She paid sh. 20,000 for transport to the market. She sold the mangoes and made a profit of 60%. At what price did she sell each mango?

Algebra (P.7)

19. Solve: $8 - 3W = 20$.

Angles, Lines and Geometric Figures (P.7)

20. Find the size of angle marked m in the figure below.



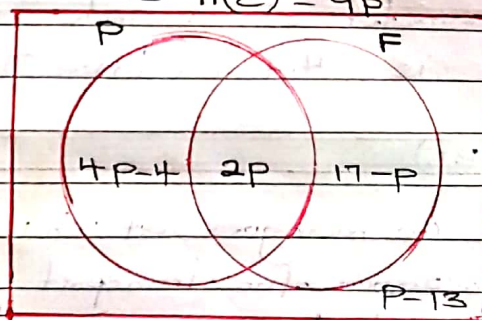
Section B (60 Marks)

Set Concepts (P.7)

21

In a family meeting attended by some members, some members were served with Pepsi (P), others Fanta (F) and others were served other drinks as shown in the Venn diagram below.

$$n(E) = 9P$$



- (a) Given that 43 members were served with only one type of drink, how many members were served with other drinks?
- (b) If a member is picked at random to give a closing prayer, what is the chance

-that he/she was served with Tandoori?

Operations on whole numbers (P.7)

- 22 (a) Find the square root of 1.96.
(b) Workout: $(8.5 \times 14) + (8.5 \times 16)$ using distributive property.

Fractions (P.7)

- 23 (a) Workout: $0.63 + 45.4 - 0.07 + 0.2$
(b) Express $0.5333...$ as a rational number in its simplest form.

Lines, Angles and Geometric figures (P.7)

- 24 Using a ruler, a pencil and a pair of compasses only;
(a) Construct a quadrilateral $WXYZ$ where line segment $WX = 7.5\text{cm}$, angle $XWZ = WZY = 90^\circ$, line $WZ = 4\text{cm}$ and angle $WXR = 60^\circ$.
(b) Measure the length XR cm

Money (P.7)

25 The exchange rates at Mwisho Forex Bureau is as follows.

Currency	Buying rates	Selling rates
US dollars	Ugsh 3645	Ugsh 3700
Kenya shillings	Ugsh 35	Ugsh 35
Euros	Ugsh 4010	Ugsh 4030

- (a) How much will a tourist having 480 US dollars and 2500 Kenya shillings get in Uganda shillings altogether?
(b) Ssekandi wants to go and watch World cup in Qatar. If he had Ug.sh 2,619,500, how many Euros will he get in exchange?

Distance, Speed and Time

26. Paul and Bob left Soroti at the same time, 8:30 a.m. to go to Pallisa.

Paul drove at an average speed of 72 km/h and Bob drove at 120 km/h. Bob arrived in Pallisa at 11:30 a.m.

(a) Calculate the time it took Bob to drive from Soroti to Pallisa.

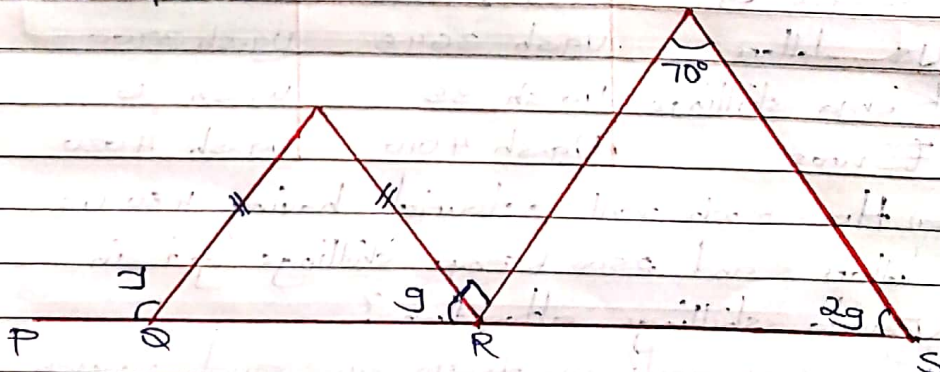
(b) Find the time when Paul arrived to Pallisa.

Fractions: Applications (P.7)

27. In St. Mary's Primary School, $\frac{1}{3}$ of the pupils enjoy eating pan cakes, $\frac{2}{5}$ of the remainder enjoy apples and the remaining 600 pupils enjoy eating Mandashi. How many pupils are in the school altogether?

Angles, Lines and Geometric Figures (P.7)

28. In the figure below, points Q and R lie on a straight line PS. VR is perpendicular to RT and line VQ = line VR. Study the figure and use it to answer the questions that follow.



Find the size of

(a) angle g

(b) angle y

Length, Mass and Capacity (P.7)

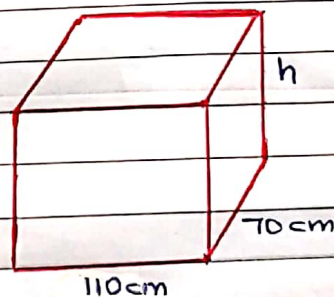
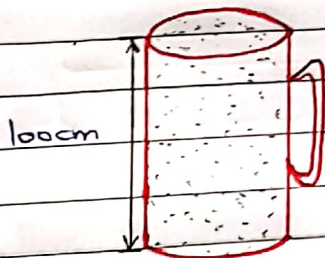
29. The wheel of a bicycle makes 280 revolutions in travelling a distance of 0.6176 km. Find, in cm, the diameter of the wheel.

Algebra (P.7)

30. Shamirah is thrice as old as Dpao. In 6 years time, the difference in their ages will be 38 years. How old will each of them be then?

Length, Mass and Capacity (P.7)

31. Figure A below represents a can full of milk. The distance around the lid (cover) of the can A is 440 cm. Figure B represents a rectangular can.



- (a) Find the radius of can A (Take $\pi = \frac{22}{7}$)
 (b) The milk in can A was all poured into can B and filled it. Find the height h of can B.

Data Handling (P.7)

- 32 The table below shows the marks scored by some candidates in an oral exams. Study and use it to answer questions that follow.

Marks	55	h	05	15
Number of Candidates	1	2	2	3

- (a) Given that the mean score was 20, find the value of h .
- (b) How many candidates scored below the mean mark.

