

MOTHERCARE PREPARATORY SCHOOLS
REVISION WORK – 2020
P.6 MATHEMATICS

Name: _____ Stream _____

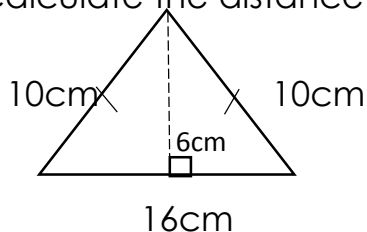
WEEK ONE

Exercise 1

1. Simplify: $4x + 7y + 2x + 3y$
 2. What is the place value of 6 in the figure below 86852?
 3. The cost of 2 pencils is sh. 800. What is the cost of 7 similar pencils?
 4. List down all the factors of 16.
 5. Given that set $A = (a, b)$. List down all the subsets of set A.
 6. A bag contains 4 green pens and 6 red pens. What is the probability of picking a red pen from the bag at random?
 7. Annet bought the following items;
 - 2kg of sugar at sh. 4000 @
 - 3kg of rice at sh. 5000 a kilo.
 - 4 pens at sh. 1200.
- a. Calculate her total bill.
- b. If she had sh. 30,000, what was her change?

Exercise 2

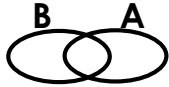
1. Given that $a = 5$ and $b = 8$. What is the product of **b** and **a**?
2. Solve $-4 + -3$ using a numberline.
3. Convert 43kg to grams.
4. Calculate the distance round the figure below.



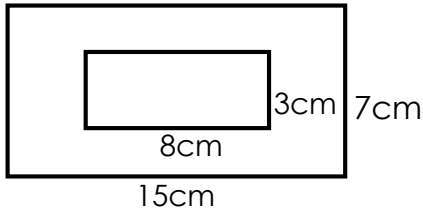
5. In a class of 120 pupils, $\frac{1}{3}$ of them are boys and the rest are girls.
 - a. What fraction are girls?
 - b. How many boys are in the class?
6. Construct a rectangle ABCD such that $AB = 8\text{cm}$ and $BC = 4\text{cm}$.
7. Given that figure 84785;
 - a. What is the value of 7 in the figure?
 - b. Write the figure in words.
 - c. Find the sum of the place value of 4 and the value of 8 in the figure above.

Exercise 3

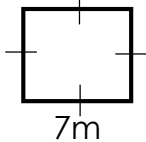
1. Given that set $P =$ (all composite numbers less than 20). Find $n(P)$
2. Convert 1101_{two} to base ten.
3. Shade set **A** complement in the Venn diagram below.



4. Round off 468 to the nearest hundred.
5. Study the figure below.



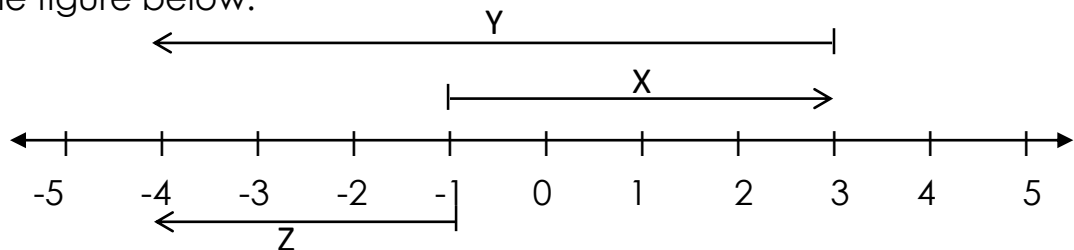
- a. Calculate the area of the
(i) Inner rectangle
(ii) Outer rectangle
 - b. Calculate the area of the shaded part.
6. Find the area of the figure below.



7. Add: 213_{five}
 $+ 111_{\text{five}}$
8. What is the value of 4 in 1430_{five} ?

Exercise 4

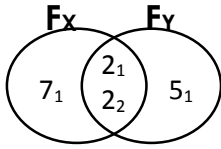
1. Subtract 4 from 3
2. Solve for X: $2X + 3 = 17$
3. Study the figure below.



- a. Write down the integers represented on the numberline.
(i) X (ii) Y (iii) Z
 - b. Write the mathematics sentence represented on the numberline.
4. Robert scored the following marks 40, 30, 40, 50, 10, 40, 60.
Find the;
(i) range (ii) modal mark (iii) median mark (iv) mean mark
 5. Find the sum of the value of 6 and the place value of **7** in the figure **6875**.

Exercise 5

1. Find the square root of 16.
2. Study the figure below.




- a. Find the value of; (i) X (ii) Y
 - b. Find the G.C.F of X and Y
 - c. Find the L.C.M of X and Y
3. Write four thousand, twenty six in figures.
 4. Rita is the 9th girl from either side of side of the line. How many girls are on the line?
 5. A motorist travelling a distance of 80km/hr. Calculate the time used.

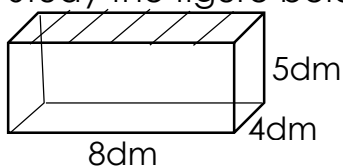
WEEK TWO

Exercise 1

1. Simplify: $7p+3q - 2p + 4q$
2. Construct an angle of 60°
3. Add: $\frac{1}{3} + \frac{1}{4}$
4. Find the L.C.M of 5 and 7
5. Set $A = (1, 2, 3)$. How many subsets are in set A?
6. Write XLIX in Hindu- Arabic numerals.
7. Arrange $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{2}{3}$ in ascending order.

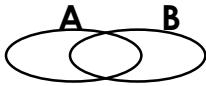
Exercise 2

1. Solve: $3 + 4 = \underline{\hspace{2cm}}$ (mod 5)
2. Workout 3×4 using repeated addition.
3. Given that  represent 7 balls. How many balls represent 49 balls?
4. Study the figure below.



- a. How many;
(i) faces (ii) vertices has the figure (iii) edges
- b. Find the volume of the figure.
- c. Calculate the area of the shaded part.

5. Set **A** = (1, 2, 3, 4, 5, 6, 7) set **B** = (2, 4, 6, 8, 9, 10)
 Represent the above information on the Venn diagram below.

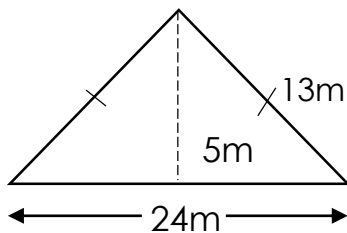


- b. Find (i) $A \cap B$ (ii) $A - B$ (iii) $n(A \cup B)$

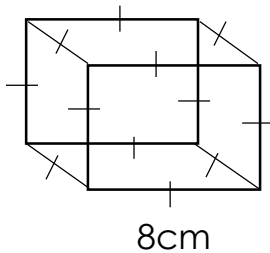
Exercise 3

1. Simplify: $4m + m + m + 2m$
2. Write the next number in the sequence. 2, 3, 5, 11, _____
3. A school has 1467 children. If the school has 625 girls, how many boys are in the school?
4. The cost of 3 dresses is sh. 21,000. Find the cost of 5 similar dresses.

5.

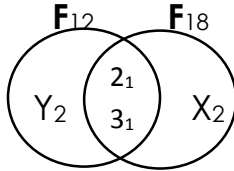


- a. Find the total distance around the figure.
 - b. Calculate the area of the figure.
6. Robert used the digits 3, 2 and 5 to form 3 digit numbers.
 - a. List down all the 3 possible digit numbers he formed.
 - b. Write down all the numbers less than 320 that he formed.
 7. Workout: $4 - 6 =$ _____ (finite 7) using a dial.
 8. The figure below is a cube. Find the sum of all its edges.



Exercise 4

1. Study the Venn diagram below and answer the questions that follow.

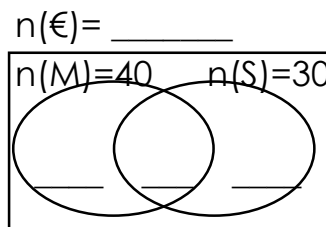


- a. Find the value of
(i) X (ii) Y
- b. Find the G.C.F of 12 and 18.
- c. Find the L.C.M of 12 and 18.
2. Tom drove at a speed of 60km in 3 hours. Calculate the distance he covered.
3. Write the next number in the sequence 1, 5, 4, 9, 8, _____
4. Construct a square with sides 4cm.
5. If $a = 4$, $b = 3$ and $c = -5$.
Evaluate
- a. $c + a$
 - b. abc
 - c. $\frac{abc}{c}$

Exercise 5

1. Dan used the digit 2, 0 and 5 to form 3 digit numbers.
- a. List down all the numbers he formed.
- b. Find the sum of the smallest and the biggest number formed.
2. Change 17_{ten} to a binary base.
3. In a class, 40 pupils like Math (M), 30 pupils like Science (S) and 10 like both subjects.

Represent the above information on the Venn diagram below.

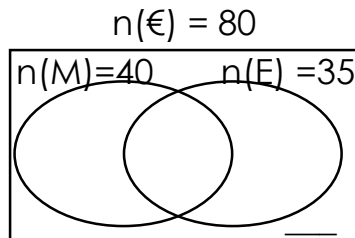


- a. How many pupils like Maths only?
- b. How many pupils are in the class altogether?
- c. How many pupils like only one subject?
4. Find the median of 40, 30, 60, 80, 40 and 20.

WEEK THREE

Exercise 1

1. Add: $489 + 16$
2. Change 4.5kg to grams
3. A box contains 7 pens and 5 books. What is the probability of picking a pen from the box at random?
4. Work out: $\frac{1}{4} \div \frac{1}{8}$ using LCM.
5. In a class of 80 pupils, 40 pupils like math (M), 35 pupils like English, X pupils like both subjects and 15 pupils like none of the two subjects.
 - a. Represent the above inform on the Venn diagram below.



- b. Find the value of X.
 - C. How many pupils like only one subjects?
 - d. What is the probability that a pupil picked at random like both subjects?

Exercise 2

1. Work out: 43×9
2. The cost of 5 chairs is sh. 250,000. Find the cost of 7 similar chairs.
3. Robert cut a cloth that was 400cm into pieces of 20cm each. How many pieces of 20cm each. How many pieces did he cut?
4. Solve for X: $3X - 2 = 12$
5. A bus travelled a distance of 200km at a speed of 50km/hr. How long was the journey?
6. Ann is 8 years younger than James. If their total age is 30 years, how old is;
 - (i) Ann
 - (ii) James
7. Workout;

(i)

Hrs	Min
8	46
+ 2	37

(ii)

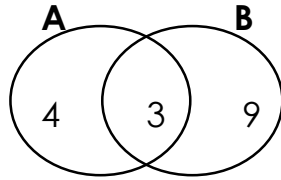
Weeks	Days
8	3
+ 4	5

(iii)

3	2 _{five}
+ 0	4 _{five}

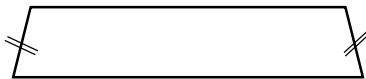
Exercise 3

1. Workout; $49 + 37$
2. Given that set $A = (a, b, c, d)$. How many proper subsets has set A?
3. What is the value of 4 in the figure 64.89?
- 4.

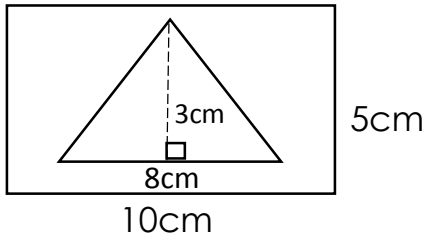


Find; (i) $n(A)$ (ii) $n(A \cup B)$ (iii) $n(B)$

5. How many lines of folding symmetry has the figure below.



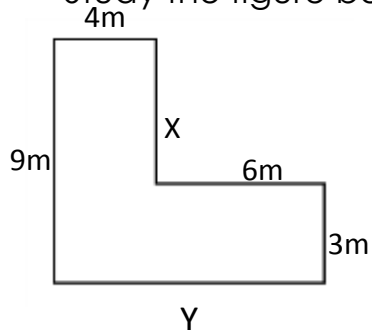
6. Study the figure below.



7. Find the area of the:
 - (i) inner figure
 - (ii) outer figure
- b. Calculate the area of the shaded part.

Exercise 4

1. Workout; $1212 \div 4$
2. Convert 2700gms to kilograms.
3. Study the figure below.



- a. Find the value of
 - (i) X
 - (ii) Y
- b. Calculate the;
 - (i) Perimeter
 - (ii) Area of the figure.

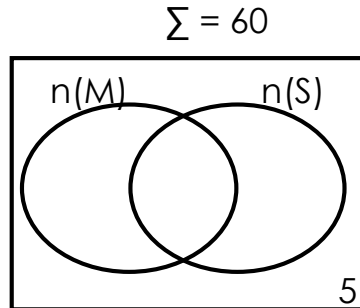
4. Construct a regular hexagon of side 5cm.
5. Round off 467.27 to the nearest tenths.
6. Write 4675 in scientific notation.

Exercise 5

1. Simplify: $8x - 2y + 3x + 5y$
2. Round off 46.856 to the nearest one decimal place.
3. Workout: $4 \quad 3_{\text{five}}$

$$\begin{array}{r} -1 \quad 4_{\text{five}} \\ \hline \end{array}$$

4. In a class of 60 pupils, 20 pupils like Maths (M) only, 25 like science (S) only X like both subjects and 5 pupils do not like any of the two subjects.
- a. Complete the Venn diagram below.



- b. Find the value of X.
- c. How Many pupils like Maths?
- d. What is the probability that a pupil picked at random likes none of the two subjects?
5. The area of a square is 49m^2 . Find the length of its sides.

****THE END****