YEAR 8 MATHEMATICS WEEK 9 2020 (TERM 1)

Year: 8   **Date: Tuesday 31 March 2020**

STRAND: NUMBERS   **TOPIC: PERCENTAGE (%)**

LESSON OUTCOME: At the end of this lesson student(s) should be able to calculate mixed problems on % of Amounts.

Instructions: Hi dear Parents/Guardians and students - In this Lesson students are going to do mixed problems on % and do the selected questions for **Exercise 3.22**.

[*Note that all the Quizzes/Test and or Assignment will be based on the selected questions for each exercise. These lessons are designed for* **one hour per Lesson**. *]*

What to do: Read through the Examples below and do the following selected questions

Exercise 3.22: Question 3 (Do: f, g, h, i)

Question 5 (Do: All)

Solutions: Solutions will be available online via
https://www.facebook.com/centralschoolemergencyforum/posts/108720557434149

4. Copy the answer grid into your book.

Did you take a bath today, son?

Calculate the following to find the son's reply.

I	5% of 100	S	35% of 90
T	150% of 100	E	60% of 180
R	40% of 200	N	75% of 250
O	60% of 300	H	25% of 96
M	200% of 400	G	72% of 256
W	20% of 160	Y	32% of 145

32	24	46.4	5	31.5	150	24	108	80	108	180	187.5	108	800	5	31.5	31.5	5	187.5	184.32

EXERCISE 3.22 – Mixed Percentage Problems

1. Copy and complete this table:

%	Fraction out of 100	Simplest fraction
a. 75%		
b. 90		
c. 40		
d.	$\frac{50}{100}$	
e.	$\frac{30}{100}$	
f.	$\frac{80}{100}$	
g. 32		
h. 88		
i. 44		
j.	$\frac{24}{100}$	

2. Copy and complete this table:

Fraction	Decimal	Percentage
$\frac{3}{4}$		
$\frac{4}{5}$		
	0.23	
		65%
		$13\frac{1}{2}\%$

3. a. Give $\frac{3}{5}$ as a percentage.

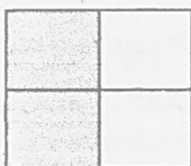   b. What is the difference between $\frac{1}{2}$ and $\frac{9}{10}$ as a percentage?

   c. In a test Julie got 21 questions correct and 4 wrong. What was her percentage result?

   d. A water tank holds 400 litres. If 120 litres leaked out, what percentage of water was left?

   e. On a roll of 24 photos 6 did not come out. What percentage of photos was lost?

   f. What percentage of the following rectangles is shaded?

   i.   ii.

   g. The ages of a class of Year 7 students are given.
      For the class calculate the percentage of students who are:
      i. 11 years old
      ii. 12 years old
      iii. less than 13 years old

Age	Students
11	10
12	8
13	7

h. In this same class 3 students are left-handed. What percentage of the students are left-handed?

i. Match the following fractions with their equivalent percentages:

$\dfrac{1}{2}$	$\dfrac{9}{10}$	$\dfrac{2}{5}$	$\dfrac{7}{8}$	$\dfrac{2}{3}$	$\dfrac{5}{6}$
$87\frac{1}{2}\%$	50%	$66\frac{2}{3}\%$	90%	$83\frac{1}{3}\%$	40%

4. Calculate:

a.	20% of 40	e.	3% of 700	i.	0.7% of 120
b.	32% of 75	f.	29% of 1100	j.	37.5 of 24
c.	45% of 120	g.	15% of 13	k.	$2\frac{1}{2}\%$ of 34
d.	60% of 85	h.	1.8% of 4200	l.	$87\frac{1}{2}\%$ of 430

5. The most commonly occurring letters in the English language are:

E – 13%   T – 9%   A – 8%

In Vanuatu approximately 87% of people are right handed.

When the Year 8 students at Everage High School wrote an English essay, the total number of letters they used was 300 000.

a. Find the approximate number of:
   i.   Letters written by right handed students
   ii. E's used
   iii. A's and T's written

b. About how many A's were written by left-handed students?

c. Port Vila has a population of about 30 000.
   Approximately how many left handed people live in Port Vila?