TOP STARS NURSERY AND PRIMARY SCHOOL KKUNGU

PRMARY FOUR MATHEMATICS

ROMAN NUMERALS

Lesson – 1

LESSON HINTS

1) Roman numerals are symbols in letters used to represent numbers.
2) Roman numerals are written in capital letters only
3) Roman numerals are symbol in letter form used to represent equal values in Hindu Arabic.

BASIC ROMAN NUMERALS

These are single letters representing numbers.

Numbers in Hindu Arabic	Numbers in Roman Numerals
1	I
5	V
10	X
20	XX

Whole numbers are written in Roman Symbols basing on:

- Repeating procedure
- Addition procedure
- Subtraction procedure

Numbers written by repeating Roman symbols

2 = 1+ 1	20 = 10 + 10	30 = 10+10+10
1= 1	10 = X	10 = X
+ 1 =1	+10 = X	10 = X
2 = 11	20 = XX	XXX

Numbers written by adding Roman numerals

13 =10+3	27 = 20+7
10 = X	20 = XX
+3 = 111	+7 =V11
13 = XIII	27 = XXVII

Whole numbers written by subtracting roman numerals.

4 =1 from 5
= IV
9 =1 FROM 10
=IX
40 = 10 FROM 50
=XL

Activity

1) Write the following numbers in Roman numerals.
   a) 3
   b) 9
   c) 15
   d) 19
   e) 12
   f) 23

2) Express 49 into Roman numerals.
3) My brother's age is 14 years. Change his age into Roman numerals
4) My father age is twice my mother age, if my mother age is 30 years. Express my father age in Roman numerals

LESSON - 2

Changing Roman Numerals to Hindu- Arabic Numerals.

Steps taken

1) Consider the value of each letter used
2) Give their value in Hindu – Arabic numerals
3) Add them in vertical order accurately.

Examples

1) Write XIV in Hindu – Arabic numerals.
   XIV
   X=10
   IV=+4
   XIV= 14

2) Solomon was born when the sister was XXII years old. How old was the sister in Hindu – Arabic numerals?
   XXII
   XX =20
   II = +2
   XXII = 22 Years

Activity

1) Change the following to Hindu –Arabic numerals
   a) XVIII
   b) XIX
   c) XIV
   d) XVI

2) Annet is XII years old. Write her age in Hindu-Arabic numerals.
3) Peter bought XV sweets. Write the number of sweets in Hindu-Arabic numerals.
4) Namajja is XVII years old. Change her age to Hindu-Arabic numerals.
5) The number of children in our class is XIX. Change the number in Hindu-Arabic numerals.

LESSON -3

ROUNDING OFF

1) Rounding off is the writing of numerals to their nearest values according to required place value
2) We use symbols ≈ to represent the same as (approximate).

Steps taken

a) Give each digit the correct place value
b) Identify the place values you are rounding to
c) Consider the next number after that place value.
d) When rounding off to the nearest tens and the next digit to the required place value is 5,6,7,8 and 9 add 10 to the place value of interest and if it is 0,1,2,3 and 4 add 0.

Examples:

1) Round off 241 to the nearest tens.

H	T	O
2	4	1

2 4 0
\+ 0
2 4 0

241 ≈ 240

2) Round off 1248 to the nearest tens.

T	H	H	0
1	2	4	8

1 2 4 0
\+ 1 0
1 2 5 0

1248 ≈ 1250

Note:
R.PV = Required place value
D.PV= Determining place value

Activity

1) Round off the following numbers to the nearest tens.
   a) 21
   b) 144
   c) 465
   d) 685
2) Round off 37 to the nearest tens.
3) Round off 126 to the nearest tens.
4) Round off 43 to the nearest tens

LESSON 4

Rounding off Whole numbers to the nearest hundreds.

Note.

When rounding off to the nearest hundreds and the next digit to the required place value is 5,6,7,8 and 9 add 100 to the place value of interest and if it is 0,1,2,3 and 4 add 0

Examples

1) Round off 685 to the nearest hundreds

   TH | T O
   6 8 | 5
   6 0 0

   6 0 0
   + 1 0 0
   7 0 0

   685 ⌒ 700

2) Round off 123 to the nearest hundreds

   H | T O
   1 | 2 3
   1 0 0
   +0
   1 0 0

   123 ⌒ 100

Activity

1) Round off the following numbers to the nearest hundreds
   a) 232
   b) 277

c) 7546
d) 4265
2) Round off 1052 to the nearest hundreds
3) Round off 974 to the nearest hundreds

LESSON – 5
Rounding off Whole numbers to the nearest thousands

Note:
When rounding off to the nearest thousands and the next digit to the required place value is 5,6,7,8 and 9 add 1000 to the place value of interest and if it is 0,1,2,3 and 4 add 0

Examples

1) Round off 4625 to the nearest thousands

TH	H	T	O
4	6	2	5

4 0 0 0
+1 0 0 0
5 0 0 0

4625 ⌒ 5000

2) Round off 13424 to the nearest thousands

TTH	TH	H	T	O
1	3	4	2	4

1 3 0 0 0
+ 0
1 3 0 0 0

13424 ⌒ 13000

Activity

1) Round off the following numbers to the nearest thousands
   a) 4625
   b) 7546
   c) 4770
   d) 4325
2) Round off 1211 to the nearest thousands
3) Round off 22222 to the nearest thousands
4) Round off 6599 to the nearest thousands

LESSON -6
Operation on Whole Numbers

Whole numbers can be operated by

a) Adding
b) Subtracting
c) Multiplying
d) Dividing

Addition

The result offer adding numbers is sum

Steps taken

a) Arrange the given numbers vertically according to place values.
b) Ass correctly starting with ones

Examples

1) Add

   4325
   +613
   4938

2) Find the sum of 2456 and 342

   2456
   +342
   2798

Activity

1) Add the following numbers correctly

a) 374
   +112

b) 4770
   +118

c) 1211
   +8544

d) 723 +136
e) 4563 +1232

2) A class has 32 girls and 47 boys. Find the total number of pupils in that class.
3) Jane was given shs. 1240 by her mother. How much money did he collect all together?
4) Find the sum of 736 and 459
5) Thomas is 16years old and the sister is 29 years old. Find their total age.

LESSON -7

Addition of Whole numbers with Regrouping

Note:

Whenever we add and get the sum of 2 digits more than 9, we regroup the one in tens place value.

Steps taken

1) Add correctly and regroup where applicable
2) The sum obtained is the answer

Examples

Add

1) 45678
   +23245
   68923

2) 9762
   +1238
   11000

Activity

1) Add the following numbers correctly.
   a) 5643
      +178

   b) 89713
      +23632

   c) 6789
      +1234

   d) 5793
      +2468

2) Winnie was given 93578kg of beans by the COVID -19. Task force on Monday and 45332kg of beans on Tuesday. How many kg of beans was she given altogether?
3) Find the sum of 5021 and 12199.
4) Nanziri was given shs.34,328 on Monday and shs. 23,948 on Tuesday. How much money was she given altogether?
5) The Ministry of Education gave 42,383 books to private schools and 31,758 to government aided schools. How many books did the Ministry give out?
6) Abaho spent shs. 34,837 last week and shs.36,838 this week. Find the total amount that he spent?

LESSON -8

Subtraction of whole numbers without Re-grouping

Steps Taken

1) Arrange the numbers vertically according to their correct place values.
2) Subtract correctly starting from ones.

Vocabulary involved in subtraction

1) Subtract
2) Take away
3) Difference
4) Reduce
5) Decrease
6) Deduct
7) Remain with
8) How many move

Examples

Subtractthese numbers

a) 485 -243

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 485
-243
 242
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b) Subtract 31025 from 68379

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 68379
-31025
37354
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Activity

1) Subtract the following numbers correctly
   a) 38136
      -3014

   b) 46379
      -5137

   c) 85798
      -61347

   d) 96787
      -51634

2) Subtract 23,684 from 66,897
3) What is the difference of 25,234 and 4031?
4) Out of 56,736 people who watched the match 32,412 were women. How many men watched the match?
5) Mr. Omara got a salary of shs.72,876. He spent shs.30,721 on school fees. How much money did he remain with?
6) By how much is 79,838 greater than 52,326?
7) By how much is 31,462 less than 83,597?

LESSON -9

Subtraction of whole numbers with regrouping

Note:

The result of subtraction is called difference

Steps taken

a) Re-arrange the numbers vertically according to their place value
b) Regroup accurately if applicable
c) Get the difference

Examples

1) Subtract these numbers
   a) 68,375 – 43,786

      7 12 16 15
      6 8 3 7 5
     -4 3 7 8 6
      2 4 5 8 9

   b) Find the difference between 94,834 and 76,956

      94834
      -76956
       17878

Activity

1) Work out the following
   a) 34683
      -3468

   b) 38430
      -7985

   c) 47,342
      -19,785

   d) 51,307
      -19,839

   e) 81,342 – 57,654

2) Subtract 23,864 from 48,230
3) What number is added to 36,485 to get 52,431?
4) Out of 65,382 copies of newspaper printed everyday 57,497 are brought. How many copies remain unsold?
5) Alitwala hold shs.73,842 and spent shs.47,483 on food. How much money remained?
6) Take away 3789 from 53,845.

LESSON -10

Multiplication of whole numbers

Note

The result of multiplication is called a product

Steps taken

a) Arrange the numbers vertically
b) Multiply according to their place values correctly
c) Re-group where applicable
d) Get the product of the given number

Vocabulary involved in multiplication

a) Multiply
b) Product
c) Times
d) Of
e) How many

Multiplying numbers by Zero

Note
When multiplying any whole numbers by zero the product is zero.

Examples
1) Multiply 243 by 0
   243 x 0 =0
2) Multiply 457 by 0
   457 x0 =0
3) 12 x0 x3 = 0

Activity

Work out the following

a) 245 x 0 =

b) 6,763 x 0 =

c) 20 x 0 =

d) 7 x0 x3 =

e) 3 x4 x0 =

f) 0 x 0 x3 x2 =

g) 0 x6 x7 =