SENIOR ONE REVION WORK

Note: You may use the learners' guide.

TOPIC 1: Number bases

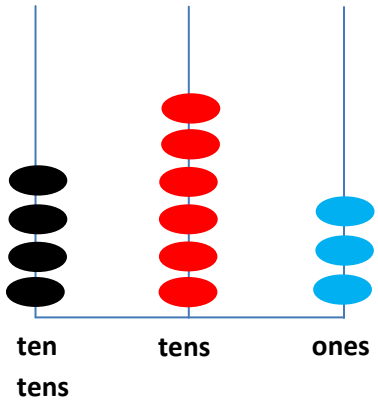
Learners are familiar with decimal place values. This helps them to develop understanding of numbers written in other bases.

1.1)Identifying numbers of different bases on an abacus

Activity 1

Identify the base represented in each of the abaci below

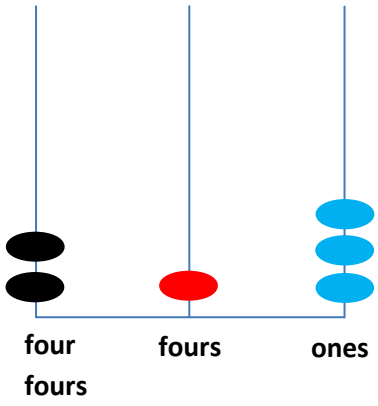
a)



i)base……

ii) Number……

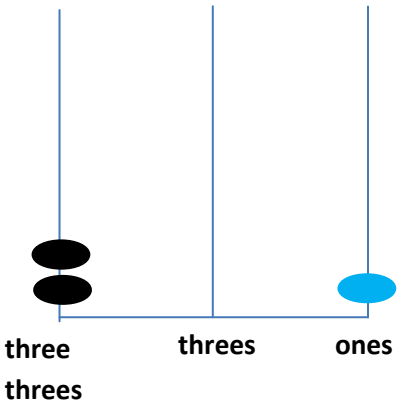
b)



i)base……

ii) Number……

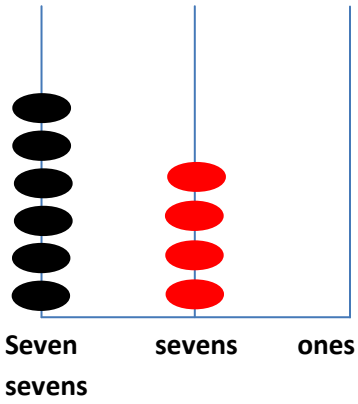
c)



i)base……

ii) Number……

d)



i)base……

ii) Number……

1.2) Representing numbers on the abacus

Activity 2

Represent each of the following numbers on the abacus.

a) 2011_{three}

b) 2321_{four}

c) 5463_{eight}

d) 6578_{nine}

1.3) Converting numbers from one base to another base.

Activity 3.

Convert the following numbers to the base indicated.

a) 267_{eight} to base nine

b) 651_{seven} to base five

c) 654_{nine} to base four

d) 5534_{six} to base twelve

1.4 Operations on numbers in various bases.

Activity 4

a) Add; i) 672_{eight} to 514_{eight}

ii) 782_{nine} to 567_{nine}

b) Subtract; i) 2102_{three} from 2211_{three}

ii) 4351_{seven} from 5645_{seven}

c) Multiply; i) 2121_{three} by 112_{three}

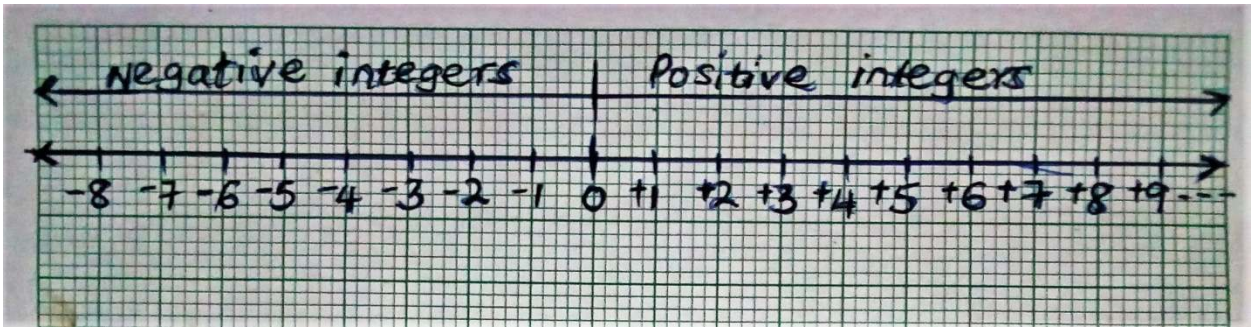
ii) 332_{four} by 122_{four}

d) Divide; i)1320_{four} by 120_{four}

ii) 176_{eight} by 22_{eight}

TOPIC 2: INTEGERS

2.1 Learners can draw the number line and on it indicate the positive and negative integers.



Integers are the positive and negative whole numbers.
A set of the whole has numbers:

W= $\{0, 1, 2, 3, 4, 5, 6, 7 - - - \}$

A set of natural (counting) numbers has members:
N= $\{1, 2, 3, 4, 5, 6, 7 - - - \}$

Note that 0 is a whole number but it is not a natural number or counting number.

Activity 1

a) List down the integers between -5 and 3.

b) List down the first 10 whole numbers.

c) List the first 10 natural numbers.

d) List down numbers that appear in all the three sets a), b), and c) above.

2.2 Reading and writing numbers using place values in base 10
The place values include;

Ones	Ten millions
Tens	Hundred millions
Hundreds	Billions
Thousands	Ten Billions
ten thousands	Hundred billions
Hundred thousands	Trillions
Millions	Ten trillions
	Hundred Trillions

Activity 2:

Read and write the following numbers in words.

a) 23,802

b) 3,004,208

c) 506,620,060

d) 2,340,506, 802

e) 4,629,842,003

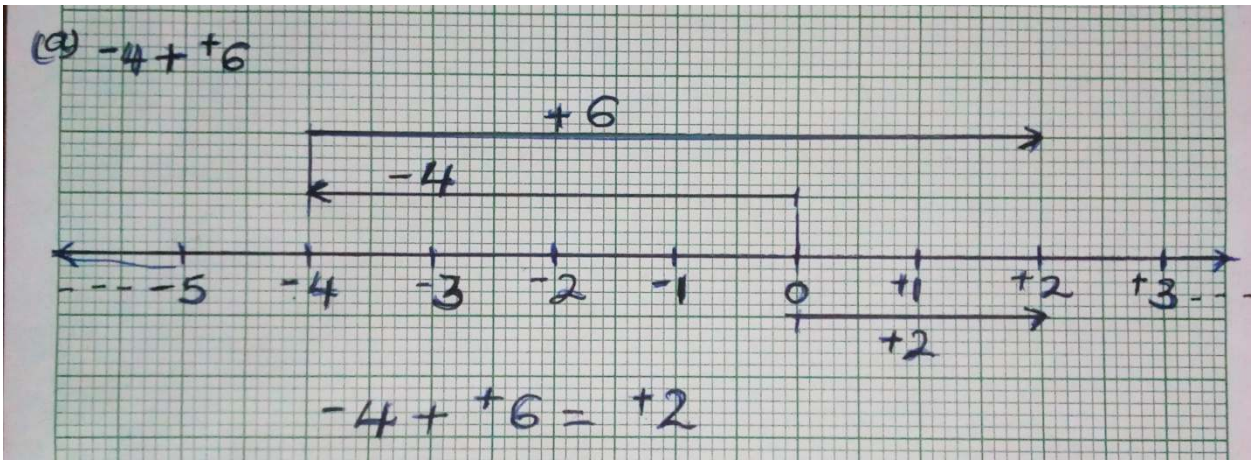
f) 1,269,384,792,300

The number line can be used to add and subtract integers.

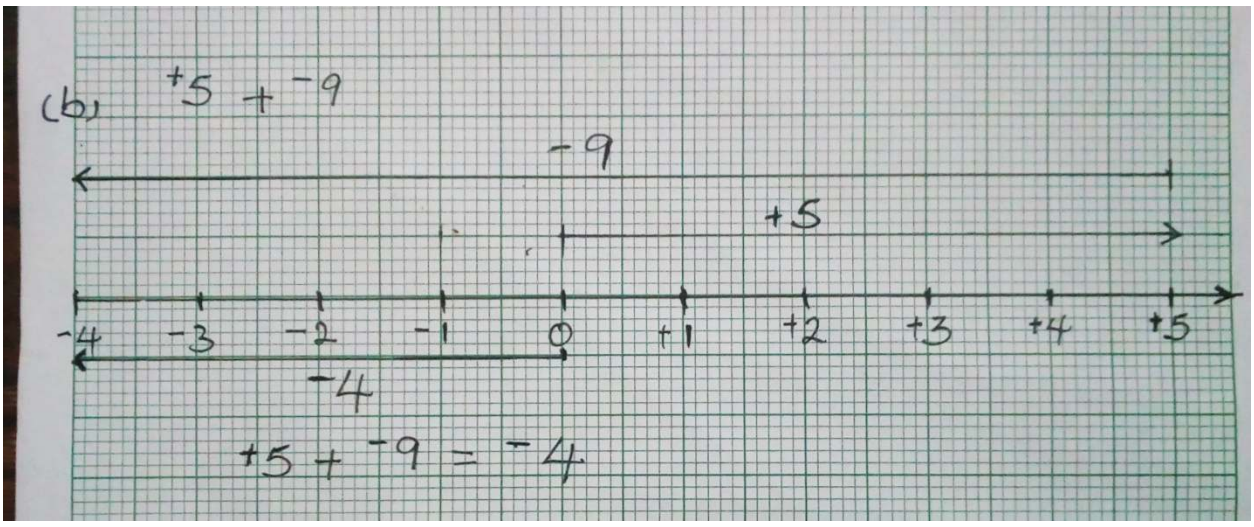
Example

Using the number line, work out the numbers below.

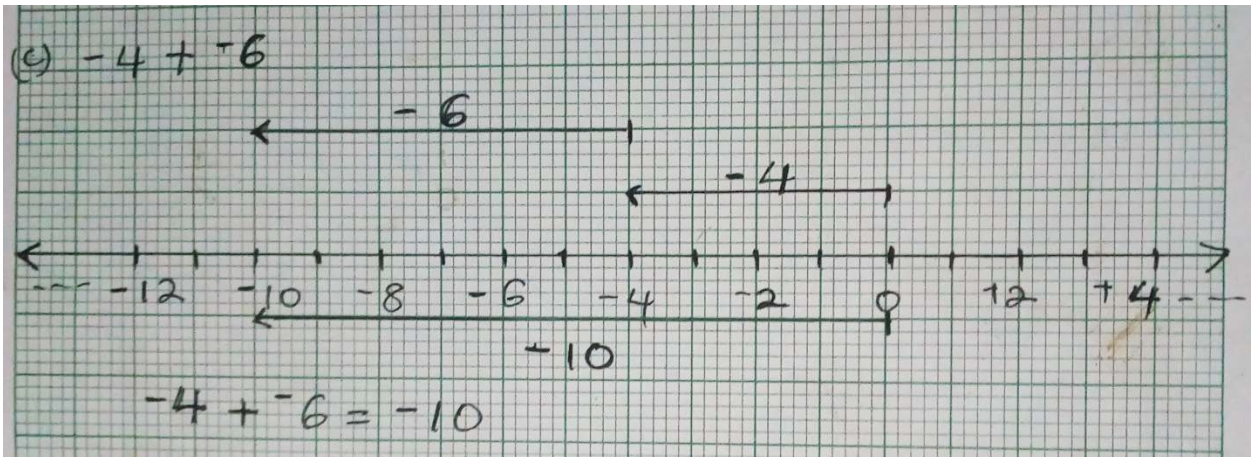
a)

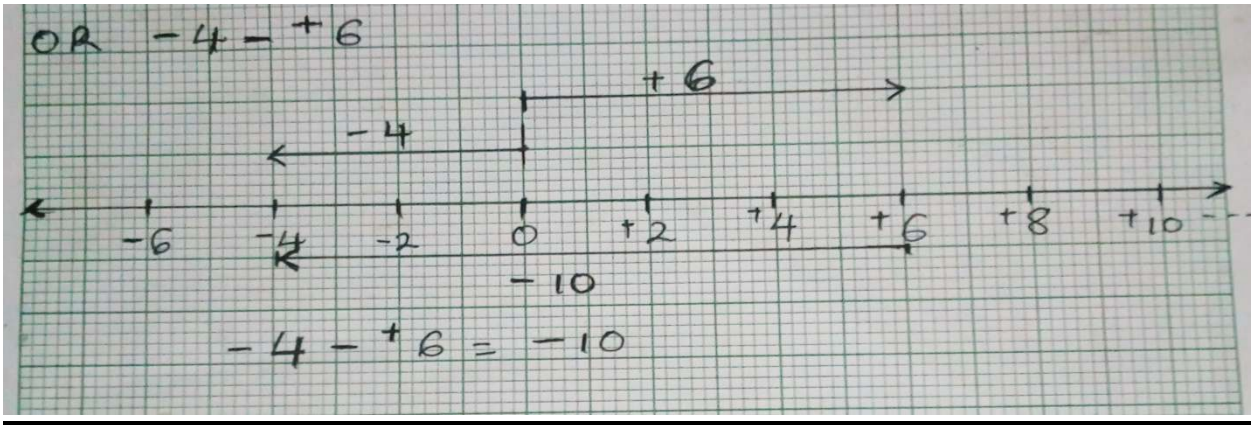


b)



c)





Activity 3

1) Using a number line, work out:

i) $^{-}5+^{+}3$

ii) $^{+}3+^{-}6$

iii) $^{-}8+^{+}5$

iv) $^{-}8-^{-}5$

2) Work out

i) $6 - 7 \div 4 + 6 \times 7$

ii) 7 of $13 - (18 \div 6 + 3) \div (9 \times 3 - 25)$

iii) $56 - (38 - 35 \div 5 + 2)$

iv) $69 \div (6 + (3 \times 8 - 7))$

3) By prime factorization, find the L.C.M and the H.C.F of;

i) 5 and 15

ii) 8, 12 and 18

iii) 70 and 90

iv) 180, 216 and 450.

4) Three schools A, B and C ring their bells at intervals of 25 minutes, 30 minutes and 40 minutes respectively. If the bells ring together at 8:00am, when will they ring together again?

Stay Home, Stay Safe