DIVINE EDUCATION CENTRE

MATHEMATICS
LESSON NOTES TERM ONE 2025
0784540287/0751565742

PRIMARY THREE

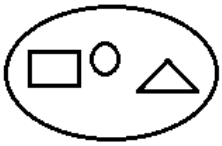
THEME: SETS

SET CONCEPTS

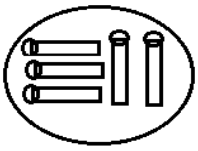
What is a set?

A set is a collection of well-defined members.

NAMING SETS Examples

1. 

A set of 3 shapes

2. 

A set of 5 match sticks

3. Loy, Sarah, Joy

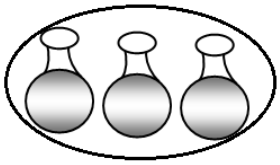
A set of 3 names

Activity

1 a, e, i, o, u _____

0, 1, 2, 3, 4, 5
6

_____

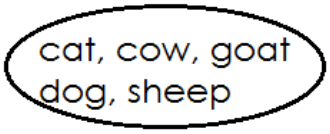
3. 

_____

4. Aisha, Sam , Joy _____

5. Lion, Zebra, Monkey
buffalo

_____

6. 

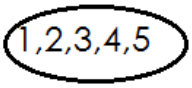
_____

DRAWING SETS

Examples

1. Draw a set of 4 books

2. Draw a set of the first 5 counting numbers



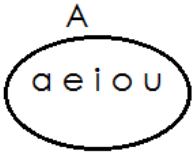
Activity

Draw the sets below.

1. A set of the first 5 letters of alphabet.
2. A set of 4 trees.
3. A set of 6 balls.
4. A set of 2 cars
5. A set of 3 dolls
6. A set of 6 names
7. A set of 3 birds
8. A set of 4 shapes.

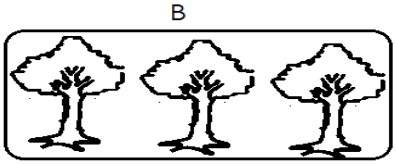
COUNTING MEMBERS IN A SET

Examples

1. 

How many members are in set A?

Set A has 5 members

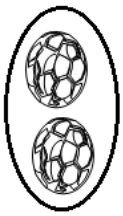
2. 

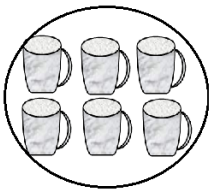
How many members are in set B?

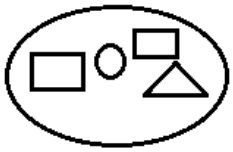
There are 3 members in set B

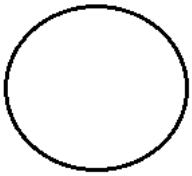
Activity

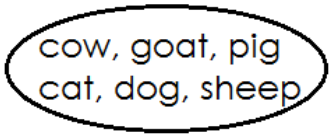
Count the number of members in the sets below

1.  _____

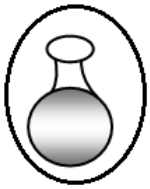
2.  _____

3.  _____

4.  _____

5. 

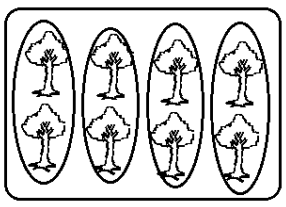
_____

6.  _____

GROUPING MEMBERS OF A SET

(a) Grouping members of a set-in twos.

Examples

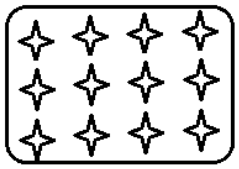
1. 

There are **4** groups of **2** trees.

There are **8** trees altogether.

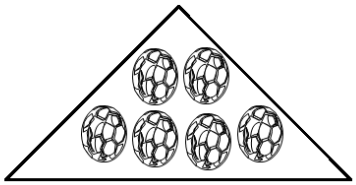
Activity

Count and pair the members in the sets.

1. 

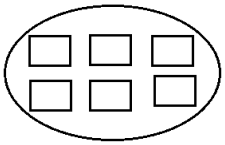
There are _____ groups of 2 stars.

There are _____ stars altogether.

2. 

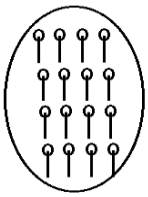
There are _____ groups of 2 balls.

There are _____ balls altogether

3. 

There are _____groups of 2 squares

There are_____ squares altogether.

4. 

There are_____ groups of 2 match sticks.

There are_____ match sticks altogether.

5. 

There are _____groups of 2 trees.

There are_____ trees altogether.

6. 

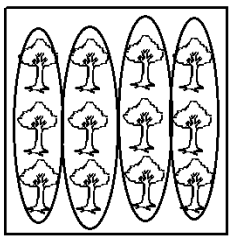
,

There is _____group of 2 leaves.

There are _____ leaves altogether.

B. **GROUPING MEMBERS OF A SET IN THREES**

Examples

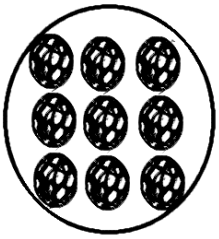


There are _____groups of 3 trees.

There are _____trees altogether.

Activity

Count and group members in threes.

1. 

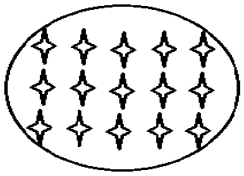
There are _____groups of 3 balls.

There are_____ balls altogether.

2. 

There are _____groups of 3 trees.

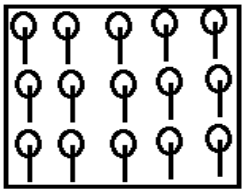
There are_____ trees altogether.

3. 

There are_____ groups of 3 stars.

There are_____ stars altogether

4. There are_____ groups of_____ match sticks.



There are _____matchsticks altogether.

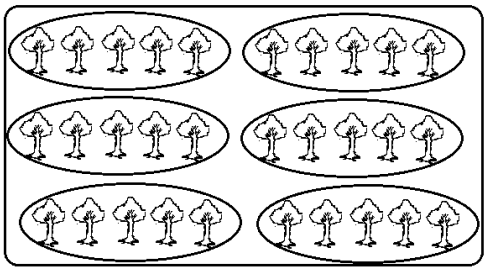
5. 

There is_____group of _____chairs.

There are _____ chairs altogether.

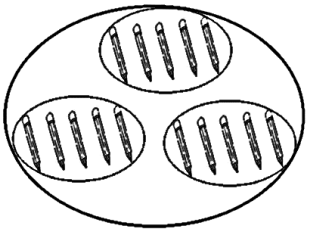
C. **GROUPING MEMBERS OF A SET IN FIVES**

Examples

1. 

There are **6** groups of **5** matchsticks.

There are 30 matchsticks altogether.

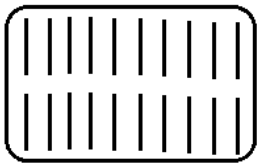
2. 

There are **3** groups of **5** pencils.

There are **15** pencils altogether.

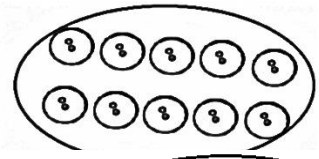
Activity

1. Count and group members



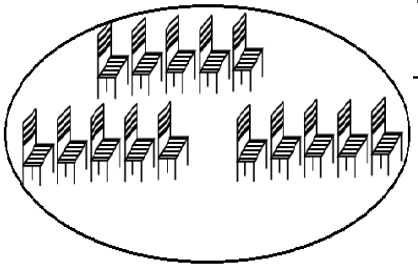
There are _____groups of 5 sticks.

There are_____ sticks altogether.

2. 

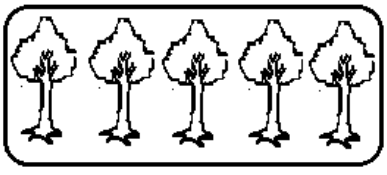
There are _____group of 5 buttons.

There are_____ buttons altogether.

3. 

____group of 5 chairs.

There are _____ chairs altogether.

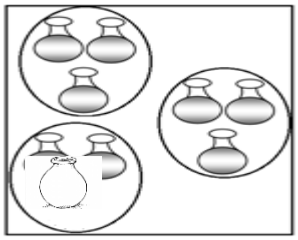
4. 

There is_____ group of 5 trees.

There are _____ trees altogether.

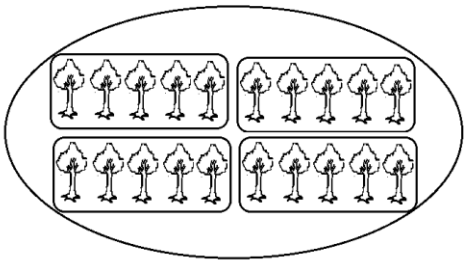
MORE ON GROUPING MEMBERS IN A SET.

Example

1. 

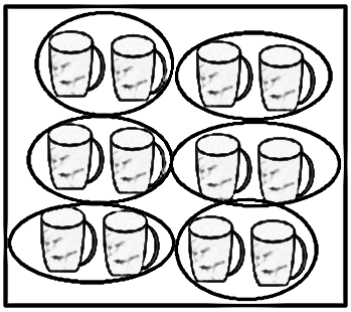
= ***3*** *groups of_____ pots.*

=_____pots.

2. 

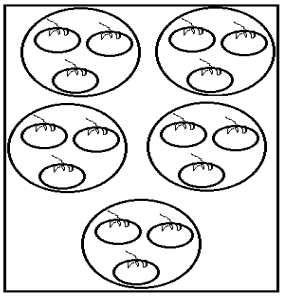
=_____groups of_____ trees.

=_____trees.

3. 

=_____groups of_____ cups.

=_____cups

3. 

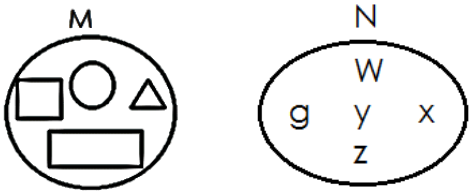
_____groups of _____apples.

=_____apples.

COMPARING SETS USING "MORE" OR "LESS"

Compare the sets below

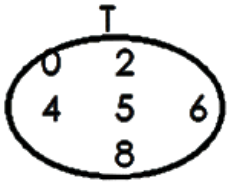
Examples

1. 

Set **M** has **4** members.

Set **N** has **5** members.

Set **N** has more members than set **M**.

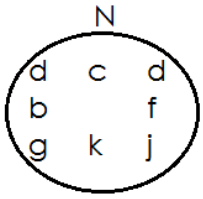
2. 

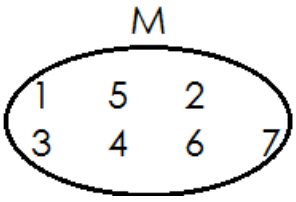
Set **T** has **6** members.

Set **S** has **3** members.

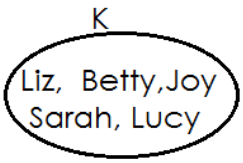
Set **S** has less members than set **T**

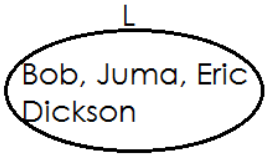
Activity

1. 

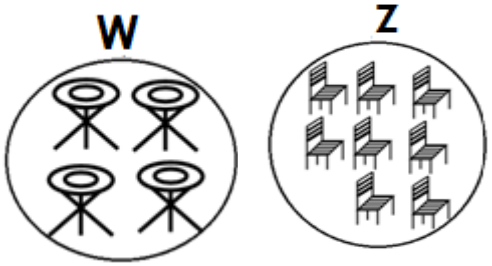


(a) How many members has set **M**?
(b) How many members has set **N**?
(c) Which set has more members?

2. 



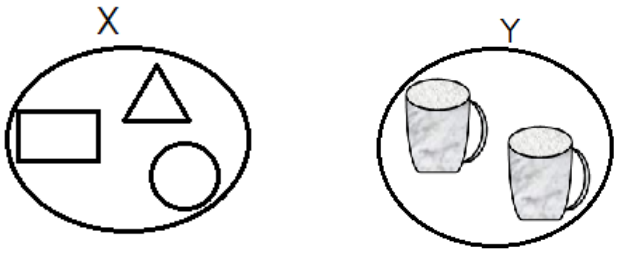
(a) How many members are there in set **K**?
(b) How many members are there in set **L**?
(c) Which set has more members?

3. 

(a) How many members has set **Z**?

(b) How many members has set **W**?

(c) Which set has less members?

4. 

(a) How many members has set **Y**?
(b) How many members has set **X**?
(c) Which set has less members?

5. **Q={0,2,4,6,8} R= {1,3,5,7,9,11,13}**

(a) How many members has set **R**?

(b) How many members has set **Q**?

(c) Which set has more members?

TYPES OF SETS

Set symbols

1. Universal set Σ
2. Equal sets
3. Non equal sets
4. Equivalent sets or
5. Non-equivalent sets or
6. Empty set
7. Union of sets ∪
8. Intersection of sets ∩
9. Matching sets or
10. Non-matching sets or
11. Is a member of Σ
12. Number of members of n ( )
13. Is not a member of

EQUAL SETS

What are equal sets?

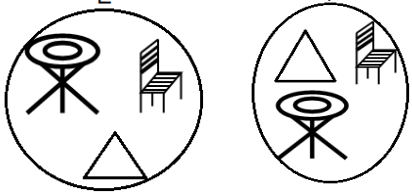
Equal sets are set with the same number and same members

The set symbol for equal sets is " = "

The set symbol for non-equal sets is " ≠ "

Examples of equal sets

1. E F



Set **E** and set **F** have the same type and number of members

Therefore set **E** and set **F** are equal sets

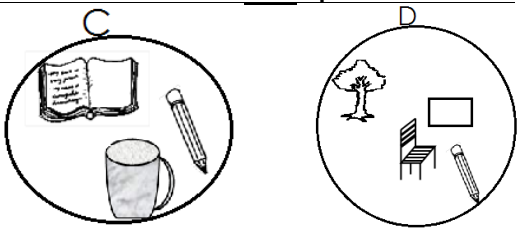
2. Set A= **{0, 2, 4, 6}** and set B= **{6, 0, 4, 2}**

Solution

Set **A** and set **B** have the same type and number of members.

Therefore set **A** is equal to set **B**

3. C D



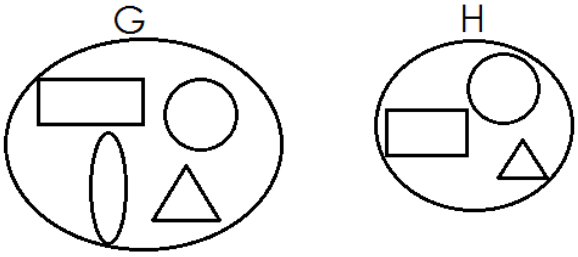
Set **C** and set **D** do not have the same type and number of members.

Therefore set **C** is not equal to set **D**

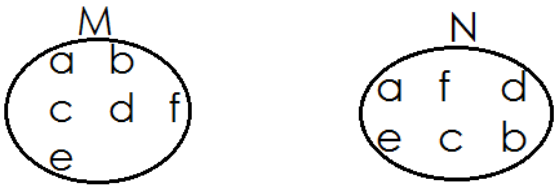
Activity

Use "**equal**" or "**not equal**"

1. G H



Set **G** is_____ to set H

2. 

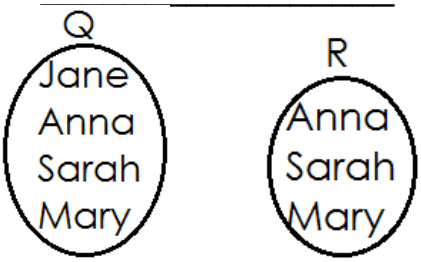
Set **M** is _____to set **N**

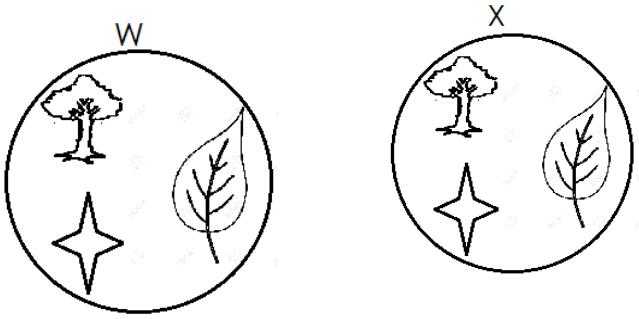
3. X={**5,3,7,8,9}** and V**={1,3,5,7,8,9**}

Set **X** is _____to set **V**

4.

Set **Q** is _____to set **R**



5. 

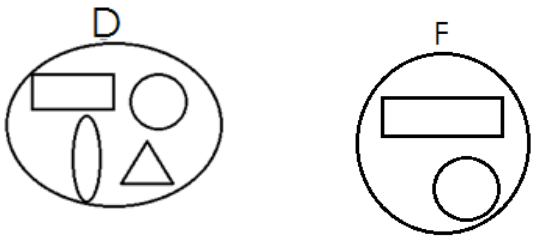
Set W is _____to set X

6. Set S= {3, 5, 7} and T= {5, 7, 3}

Set S is _____to set T

Activity two

Use = or ≠ to complete

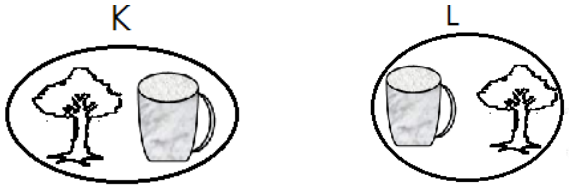
1. 

Set **D** is_____ to set **F**

2. **F**= {1, 3, 5, 6, 9} and **Q=** {1, 5, 9}

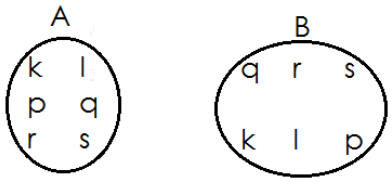
Set **F** is _____ to set **Q**

3.



Set **K** is_____ to set **L**

4.

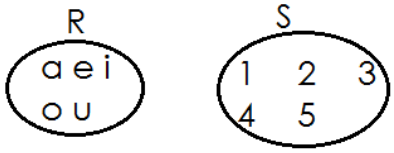


Set **A** is _____ to set **B**

5. **E**= {**a, b, c, d, e,}** and set **D**= {**b, e, d, a, c**}

Set **E** is _____ to set **D**

6.

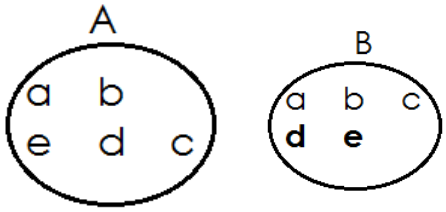


Set **R** is _____ to set **S**

MORE ON EQUAL SETS

Filing in missing member to make the paired sets equal.

Examples

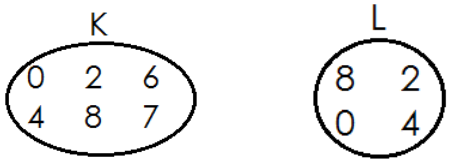


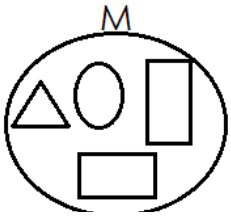
Set **A** and set **B** are now equal.

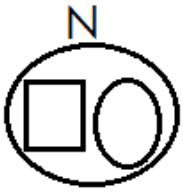
Activity

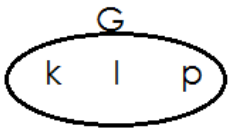
Make the paired sets equal.

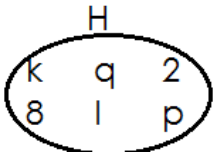
1.

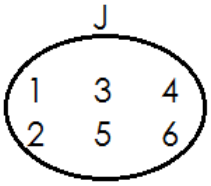


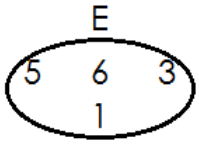
2. 

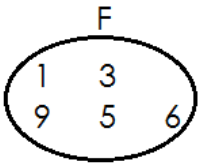


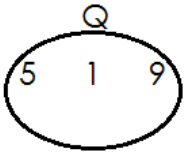
3. 



4. 



5. 



6. A= {  } and B= {  }

EQUIVALENT SETS

What are equivalent sets?

Equivalent sets are sets which have the same number of members but maybe of different kind. The symbol for equivalent sets ⟷ or ≡ or

Examples of equivalent sets

1. Set A= {a, d, g, h} and set B= {Annie, Deo, Asha, Ali}

Solution

Set A has 4 members and set B has 4 members.

Therefore, set A and set B are equivalent sets.

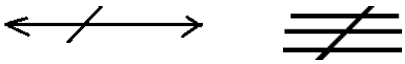
2. Set **P** {  } and set **Q** {  }

Set P has **3** members and set **Q** has **3** members.

Therefore, set P is equivalent to set **Q**.

NON-EQUIVALENT SETS

Non-equivalent sets are sets which do not have the same number of members.

The symbol for non-equivalent sets is  or

Examples of nonequivalent sets.

1. Set **A**= {**1, 2, 3, 4**,} and set B = {**a, b, c**}

   Set **A**= has **4** members and set B has 3 members

   Therefore, set **A** and set **B** Aare non-equivalent sets.

   Or

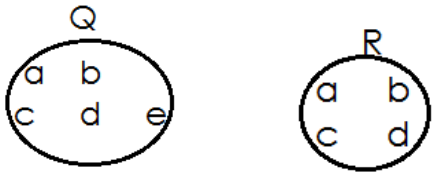
   Set **A** is not equivalent to set **B**.

Activity one

Use equivalent or not equivalent.

1. **A**= {**a, b, c**} and **B= {1, 2, 3}**

   Set **A** is_____ to set **B**

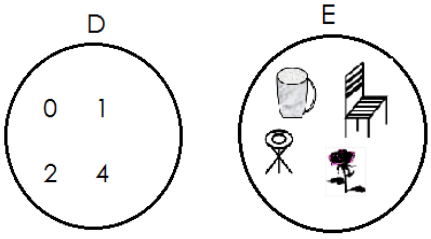
2. 

   Set **Q** is_____ to set **R**

3. Set V= {Anna, Mary, John} and set **X**=

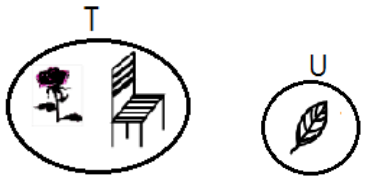
   Set **V** is_____ to set **X**

4. 

   Set **D** is _____ to set **E**

5. **P**= {**Anna, Mary, Sarah, Joy**} **Q**= {**Anna, Mary, Joy**}

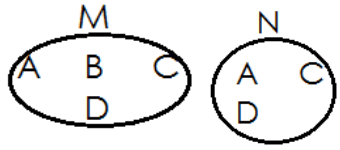
Set **P** is _____ to set **Q**

6. 

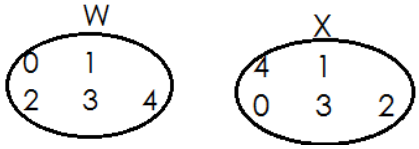
Set **T** is _____ to set **U**

Activity two

Use ⟷ or ⟷/

1. 

Set **M** is _____ to set **N**

2. 

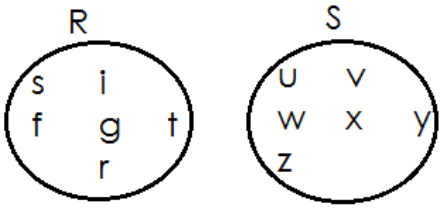
Set **M** is _____ to set **N**

3. 

B_____**C**

4. 

Z_____Y

5. 

Set **R**_____ set **S**

6. Set H= {1, 2, 3, 4} and set G=(a, b, c)

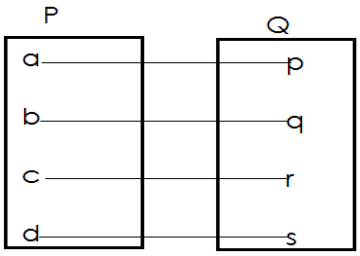
H_____G

MATCHING AND NON-MATCHING SETS

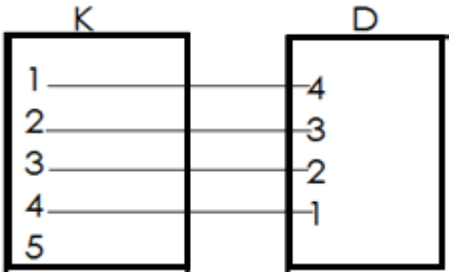
Matching sets are sets with the same number of members.

The symbol for matching set is ⟷ ≡

Examples of matching sets

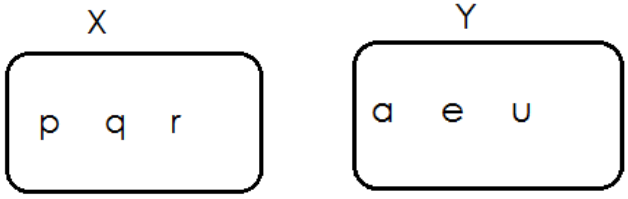
1. 

Set **P** has **4** members.
Set **Q** has **4** members.
Set **P** and set **Q** are matching sets.

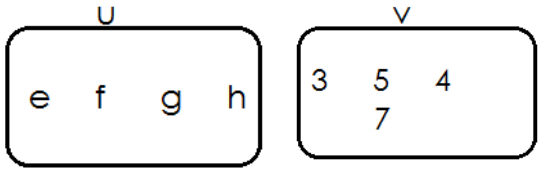
2. 

Set **K** has **5** members.
Set **D** has **4** members
Set **K** has and d are non-matching sets.

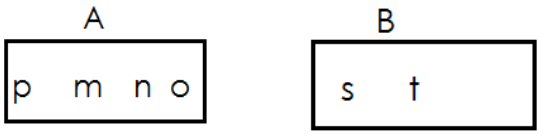
Activity



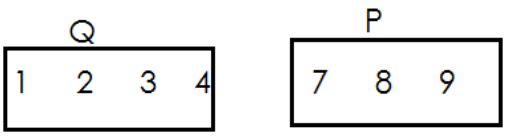
Set **X** has _____members.
Set **Y** has _____members.
Set **X** and set y are _____ sets.

2. 

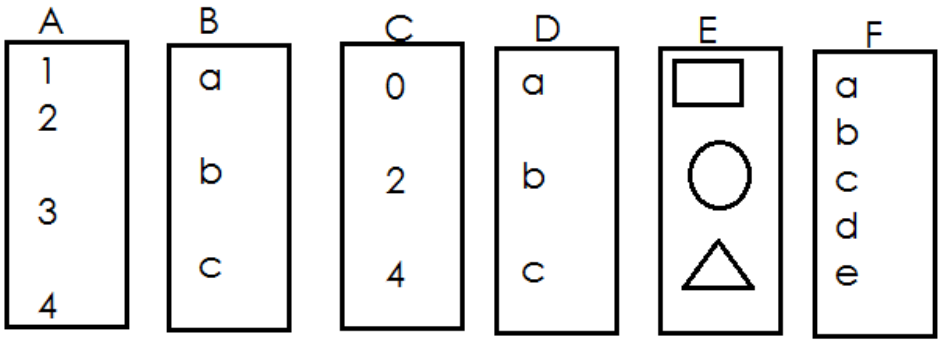
Set **U** has _____members.
Set **V** has _____members.
Set **U** and set **V** are _____sets.

3. 

Set **U** has _____members.
Set **V** has _____members.
Set **A** and set B are _____ sets.

4. 

Set **Q** has _____members.
Set **P** has _____members.
Set **Q** and set **P** are_____ members.

5. 

(a) set **A** and set **B** are_____

(b) set **A** and set **C** are_____

(c) set **A** and set **D** are_____

(d) set **C** and set **D** are_____

(e) set **B** and set **D** are_____

(f) set **C** and set **E** are_____

(g) set **A** and set **F** are_____

EMPTY SETS

What is an empty set?
An empty set is a set without members. Another name for empty set is null set.
The symbol for empty set is ∅
Examples of empty sets

1. Set **K** (pupils in p.3 with 10 legs each)

   Set **K** = { } ∅

2. Set **R** = {our teacher who are less than 3 years of age}

   Set **R = { }**

Activity

1. Set **X**= (boys in p.3 class with 3 eyes each)

   List all members of set x

   _____

2. Set **M**= {girls in P.3 who are 90 years old}

   List all members of set M.

   _____

3. given that t = **{ }.** How many members are in set T?

   _____

4. Write empty set or not empty set

(a) A set of parents with 2 babies.

_____

(b) A set of people who have five hands each

_____

(c) A set of vowels.

_____

(d) A set of homes with two cars.

_____

(e) A set of beds with 7 eyes each.

_____

(f) A set of chair in a house.

_____

(g) A set of goat with one leg.

_____

(h) A set of pupils in class

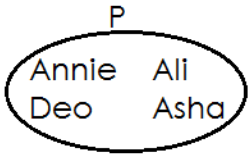
_____

(i) Three snakes have 6 legs altogether.

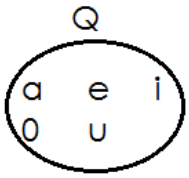
_____

LISTING MEMBERS OF A SET

Examples

1. 

Set P= {Annie, Deo, Ali, Asha}

2. 

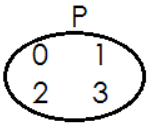
Set **Q** ={**a, e, i, o, u**}

N.B-when listing members of a set, we use curly brackets ie**, {}**

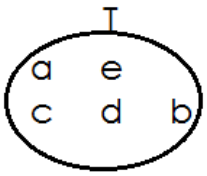
We separate each member from another using a comma

Activity

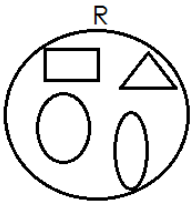
List the member of the sets below.

1. 

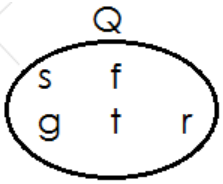
Set P = { }

2. 

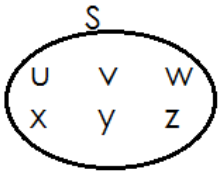
Set T= { }

3. 

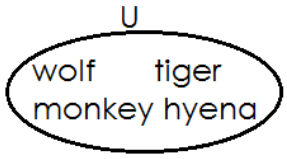
Set T= { }

4. 

Set T= { }

5. 

Set T= { }

6. 

Set T= { }

UNION OF SETS

A union set is a collection of all members of the given sets without repeating common members.

N.B: Common members are written once. The symbol for union sets is "**u**"

Examples

1. Given that **W**= **{1, 2, 3}** and set **Z={x, y, z}**

Find **W ∪ Z**

Solution

W ∪ Z={1, 2, 3, x, y, z}

2. If set **F**={**c, a, r, e, s**} and G={**c, o, n, e, s**} list down all members of set **F ∪ G**

Solution

F={c,a,r, ¢, $}

G={¢,o,n,¢,$}

Therefore **FUG ={c, a, r, e, s, o, n}**

Activity

1. If set D= **{1, 2, 3, 4, 5} and set C={2,4,6}**

Find **DUC**

2. Given that P= {**a, e, i, o, u}** and Q= {**a, b, c, d}**

What is **PUQ**

3. Set S = {**o, p, q, r, s, t**} and set T= {**m, n, o, p}**

List down all elements of set S ∪ T

4. **M**= {**b, o, y, s**} and N={**c, a, m, b, s}.**

List down all the elements of set **M ∪ N**

5. **A**={**0,2,4,6,8**} and B={**1,2,3,4,5,6,7**}

Find **A ∪ B**

INTERSECTION OF SETS

What is an intersection set?

An intersection set is a set of common members.

Examples

1. Given that set F={**c, a, r, s}** and G={**c, o, n, e, s**}

Find **F ∩ G**

Solution

F={**c, a, r, s**}

G={**c, o, n, e, s**}

F ∩ G = {**c, s**}

2. **M= {a, b, c, d, e}** and **N= {a, e, I, o, u}. Find M ∩ N**

Solution

M= {a, b, c, d, e}

N= {a, e, i, o, u}

M ∩ N= {a, e}

Activity

1. If set **A**= **{12, 3, 4, 5}** and set **B= {2, 4, 6, 8}**

   Find **A ∩ B**

2. Given that P= **{a, e, i, o, u}**

3. Set w= **{o, p, q, r, s}** and set **R= {m, n, o, p}**

   List down all the elements of set **W ∩ R**

4. **M**= **{b, o, y, s}** and **N={c, a, m, b, s}**

   List down all the elements of set **M ∩ N**

5. IF **y**= {**e, f, g, h**} and X={**r, s, t, u, v**}

   Find **Y ∩ X**

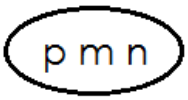
FINDING NUMBER OF MEMBERS IN A SET USING SYMBOL "n"

Examples

1. If **K**= **{a, b, c, d}** find **n{k}**

   K= **{a, b, c, d}**

   Therefore **n(k)=4**

2. Given that set **R** : 

   How many members are in set R?

   R= {p, m, n}

   n(R)=3

3. Set **A**= **{d, i, g}** and set **B= {d, o, n, e}**

How many embers are in set **A ∪ B?**

A={ d,i,g}

B= {d,o,n,e}

A ∩ B= {d}

Therefore **n{A ∩ B} = 1**

4. Set **H**= **{d, o, w, n}** and **G={d, a, w, n}**

H={d,o,w,n}
G={d,a,w,n}

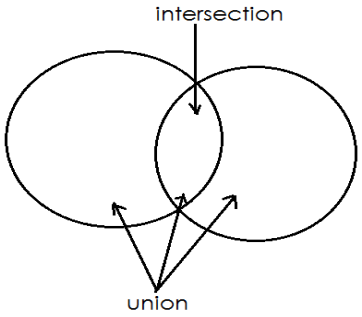
H ∪ G= **{d, o, w, n, a}**

Therefore **n{H ∪ G}=5**

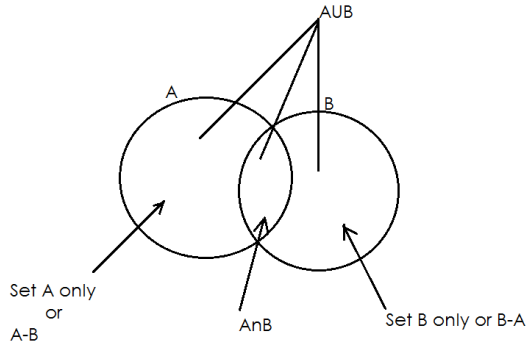
Activity

1. If **Z**= {**a, e, I, o, u**}. Find **n{z}**
2. Given that **x= {1, 2, 3, 4, 0}.** Find **n{x}**
3. R**={1,2,3,4,5}** and **s={2,4,6,8}.**find **n**{**R ∩ S**}
4. W= **{o, p, q, r, s}** and **R= {m, n, o, p}.** Find n{**W ∩ R**}
5. given that **V**={**s, t, r, p}** and **Z={s, t, r, e, a, m**} find **n{V ∪ Z**}
6. If **C**= {**1, 2, 3, 4, 5, 6**} and **D= {0, 3, 6, 9}**

A VENN DIAGRAM

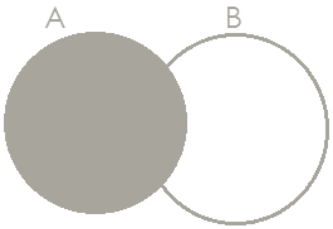


Different parts of a Venn diagram

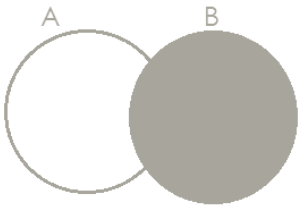


SHADING REGIONS ON A VENN DIAGRAM

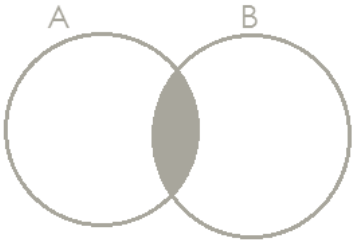
1. Set A



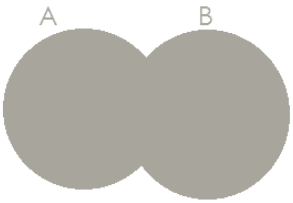
2. Set B



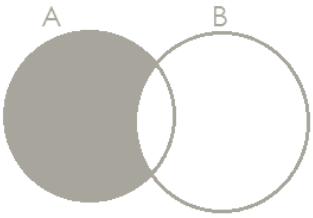
3. A∩B



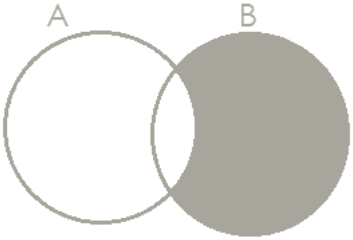
4. AUB



5. A only



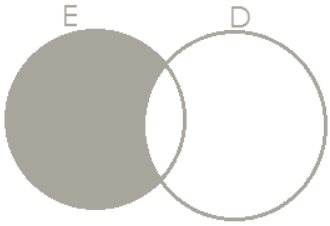
6. B only



Activity

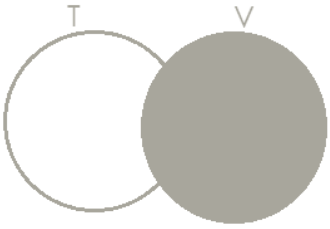
Describe the shaded regions of the Venn diagram below.

1.



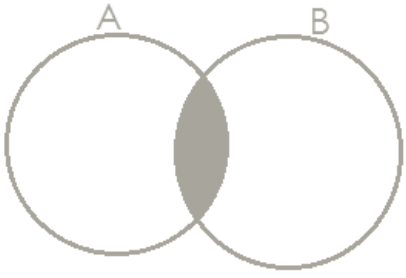
_____

2.



_____

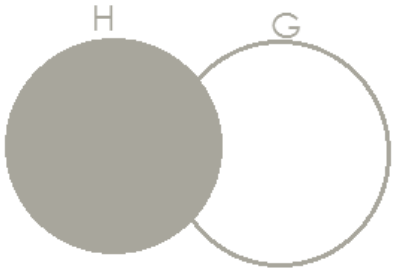
3.



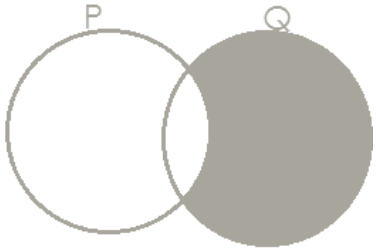
_____

4.

_____

5. 

_____

6. 

_____

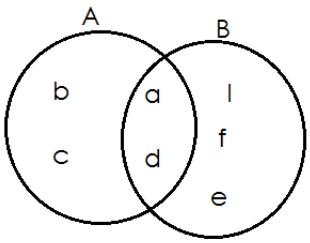
REPRESENTING MEMBERS /ELEMENTS ON A VENN DIAGRAM

Examples

1. Given that A= {**a, b, c, d}** and B= {**d, a, l, f, e**} show the two sets on a Venn diagram

A= {a, b, c, d}

B= {d, a, l, f, e}



Activity

Represent the sets below on the Venn diagram

1. **P= {1, 2, 3, 4, 5,}**

   Q= {0, 2, 4, 6, 8}

2. **N= {a, e, i, o, u}**

   M= {m, a, n, g, o}

3. **A={dog, cow, pig, sheep, cat}**

   B= {pig, fig, log, leg, dog}

4. **K= {5, 10, 15, 20, 25}**

   L= {3, 5, 7, 9, 12, 15}

T= {  }

5.

6. **C= {1, 2, 3, 4, 5,}**

   D= {0, 2, 4, 6, 8}

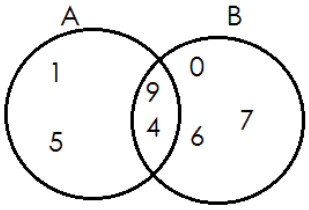
7. **G= {10, 20, 30, 40}**

   H= {5, 10, 15}

USING VENN DIAGRAMS TO SOLVE SET PROBLEMS

Example 1

Study the Venn diagram and answer the questions that follow.



(a) List down all members of stet **A**

{**1, 5, 4, 9**}

(b) List down all elements of set **B**.

{**0, 6, 7, 4, 9**}

(c) Write down all members of **A** ∪ **B**

{1, 5, 9, 4, 0, 6, 7}

(d) Find n {**A** ∩ **B**}

N {A ∩ B}= {4,9}

Therefore n{**A ∪ B}=2**

(e) Find **n{A-B}**

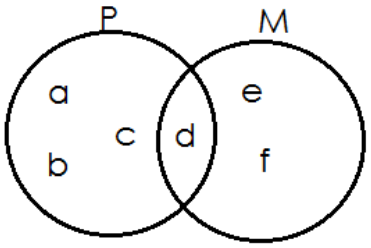
n{A-B}={1,5}

Therefore n{A-B} =2

Example 2

Given that set **P= {a, b, c, d}** and set **M= {d, e, f}**

a. Represent set **P** and **K** on the Venn diagram below.



b. Find

(i) **P ∩ M**

P ∩ M = {d}

(ii) **P ∪ M**

P ∪ M= {a, b, c, d, e, f}

(iii) n(P)

n(P) = {a, b, c, d}

Therefore n(P)=4

(iv) n(M) = {d, e, f}

n(M) = 3

(v) n{M-P}

n{M-P} = {e, f}

Therefore n{M-P} = 2

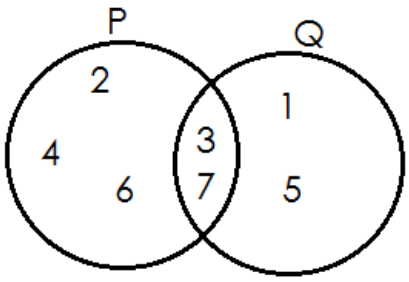
(vi) n(P-M)

n(P-M) = {a, b, c}

Therefore n(P-M) = 3

Activity

1. Study the Venn diagram below and answer the questions



(a) List down all elements of set **P**

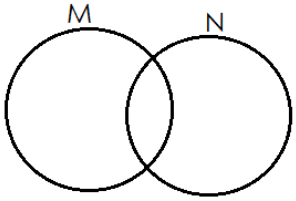
(b) Find P ∪ Q

(c) How many members are in set **P ∩ Q.**

(d) What is n(Q)?

2.If set M= {1, 2, 3, 4, 5} and set N= {0, 2, 4}

(a) Fill in the Venn diagram below using set M and N.



(b) Find n(M)

(c) How many elements are in set N?

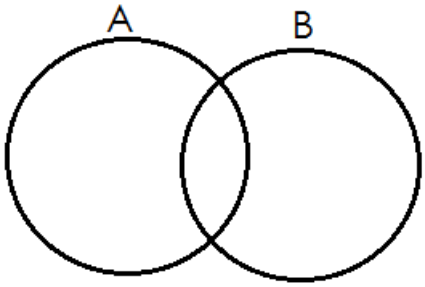
(d) Find:

(i) **n (M ∩ N)**

(ii) **n (M ∪ N)**

3. Given that set A**= {a, e, i, o, u}** and set B= **{a, b, c, d}**

(a) Fill in the Venn diagram below using set A and set B



(b) How many members are in set A?

(c) Find

(i) **n(B)**

(ii) **A ∩ B**

(iii) **n(A ∪ B)**

(iv) **n(A)**

THEME: NUMERACY

TOPIC: WHOLE NUMBERS

SUB-TOPIC: THOUSANDS, HUNDREDS, TENS AND ONES

PLACE VALUES OF WHOLE NUMBERS

Qn. What is a place value?

- A place value is the position of a digit in a number.

Finding place values of numbers

Examples

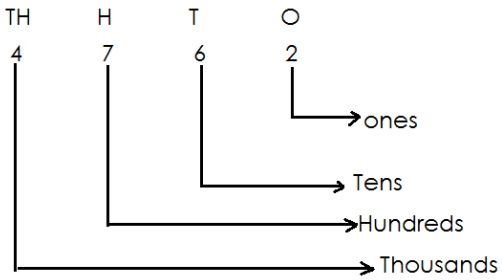
1. Write the place value of each digit in the number

TH-thousands

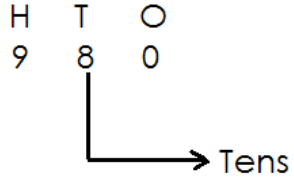
H-hundreds

T-tens

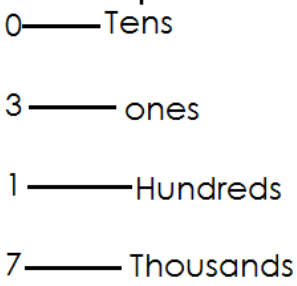
O-ones



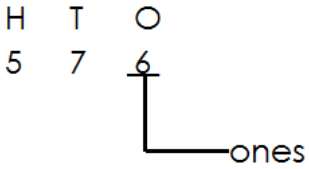
2. Find the place value of 8 in 980



3. Write the place value of each digit in 1703?



4. Find the place value of the underlined digit in the number



Activity

1. Write the place value of each digit in

(a) **4073** (c) **9467** (b) **871** (d) **59**

2. Find the place value of the underlined digits in the number

(a) **9321** (b) **3204** (c) **6821** (d) **5297**

3. Write the place value of the underlined digits in

(a) **4094** (b) **681** (c) **9764** (d) **5723**

4. What is the place value of **2** in **8026**?

5. Find the place value of **6** in **1640**

6. What is the place value of **9** in **9000**?

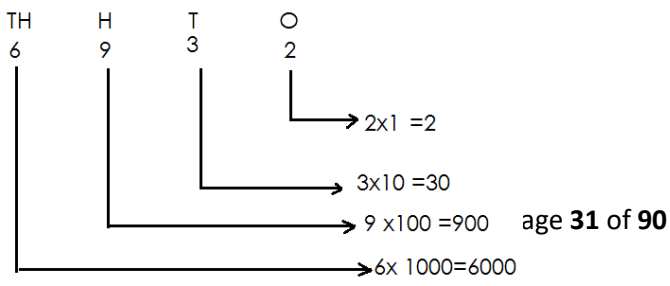
VALUES OF WHOLE NUMBERS

A value is the amount a digit holds in a number

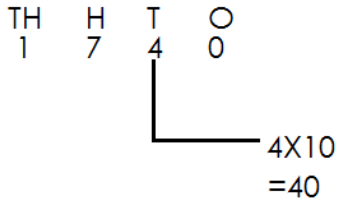
Examples

1. Write the value of each digit in **6932**.

Solution



2. Find the value of 4 in 17 40



Activity

1. Find the value of each digit in

(a) **9476**

(b) **524**

(c) **1725**

2. What is the value of **7** in **7185**?

3. Find the value of the underlined digits

(a) **6<u>9</u>31** (c) **732<u>0</u>** (b) **8<u>3</u>21** (d) **<u>5</u>631**

4. Calculate the value of 6 in the number

(a) **6800**

(b) **4361**

(c) **9674**

<u>ADDITION OF VALUES OF NUMBERS</u>

Examples

1. 7 tens + 5 ones=

(7x10) + (5x1)

70 + 5

75

2. **2** hundreds + **7** tens + **3** ones

(2x100)+ (7x10) + (3x1)

200 + 70 +3

$$\begin{array}{r} 200 \\ +\ 70 \\ \quad 3 \\ \hline 273 \end{array}$$

Activity

Add the value of the following numbers

1. **2** tens + **5** ones=
2. **5** hundreds + **4** tens=
3. **6** thousands + **6** hundreds + **7** tens + **3** ones =
4. **8** thousands + **9** hundred =
5. **7** thousands + **4** hundreds+ **7** ones=
6. **1** thousand + **3** tens + **4** ones=_____

SUBTRACTING VALUES OF NUMBERS

Examples

1. **5** tens- **3** tens=

   (5x10)- (3x10)

   =50-30

   =20

2. **5** hundreds-**6** tens=

   (5x100) – (6x10)

   500-60

   $$\begin{array}{r} 4\,5\,10\,0 \\ -\quad 6\,0 \\ \hline 4\;4\;0 \end{array}$$

Activity
workout the following

1. **8** thousands - **7** thousands =
2. **9** tens - **2** tens =
3. **4** tens - **1** ten =
4. **3** hundreds - **5** tens =_____
5. **6** hundreds - **5** tens =

6. **5** thousands - **2** thousands =
7. **7** hundreds - **8** tens =

MULTIPLYING VALUES OF NUMBERS

Examples

1. **4** tens x **6** ones=

   (4x10) x (6x1)

   40x6

   = 240

2. **6** hundreds x **2** ones =

   (6x100) x (2x1)

   600 x 2

   $$\begin{array}{r} 600 \\ \times\ 2 \\ \hline 1200 \\ \hline \end{array}$$

3. **1** thousand x **3** ones =

   (1x1000) x 3 x1

   1000x3

   $$\begin{array}{r} 1000 \\ \times\ \ 3 \\ \hline 3000 \\ \hline \end{array}$$

Activity

1. **2** tens x **2** ones=_____
2. **8** tens x **4** =_____
3. **4** hundreds x **4** ones =_____
4. **5** thousands x **3** ones =_____
5. **2** hundreds x **6** ones =_____
6. **7** thousands x **2** ones =_____

EXPANDING NUMBERS

EXPANDING NUMBERS USING VALUES

Examples

1. Expand 312 using values

H	T	O
3	1	2

(3X100) + (1X10) + (2X1)

300+10+2

2. Expand **5146** using values

TH	H	T	O
5	1	4	6

(5x1000) + (1x100) + (4x10) + (6x1)

5000+100+40+6

Activity

Expand the following numbers using values

1. 275
2. 7856
3. 1002
4. 5471
5. 8909
6. 58
7. 560
8. 317
9. 28
10. 4846

EXPANDING NUMBERS USING PLACE VALUES

Examples

1. 586=5 hundreds + 8 tens + 6 0nes

   (5x100) + (8x10) + (6x1)

2. 6135=6 thousands + 1hundred+ 3 tens + 5 ones

   (6x1000) + (1x100) + (3x10) + (5x1)

Activity

Expand the following numbers using place values

1. 792
2. 46
3. 1381
4. 5092
5. 1234

FINDING THE EXPANDED NUMBERS

Examples

1. Which number is shown by expansion?

   7000+40+8

TH	H	T	O
7	0	0	0
		4	0
7	0	4	0

2. What number has been expanded to give?

   (4x1000) + (7x100) + (5x10) + (6x1)

   4000 + 700 + 50 + 6

```
 4000
  700
+  50
     6
 4756
```

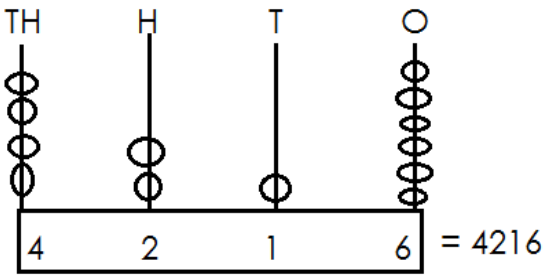
Activity

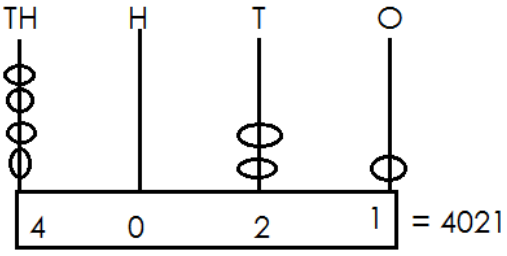
What number has been expanded?

1. 6000+60+6
2. (2x100) + (3x10) + (8x1)
3. 7000+300+50+4
4. 4000+500+60+2
5. (9x1000) + (2x100) + (7x10) + (5x1)
6. 700+70+0
7. (6x10) + (2x1)

<u>WRITING NUMBERS SHOWN ON THE ABACUSES</u>

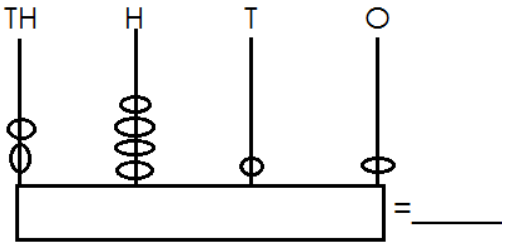
Examples

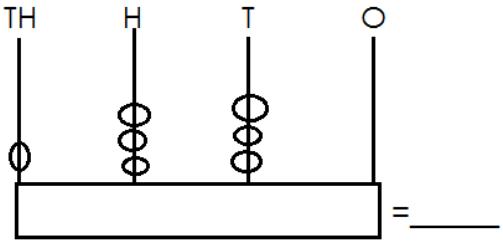
1. 

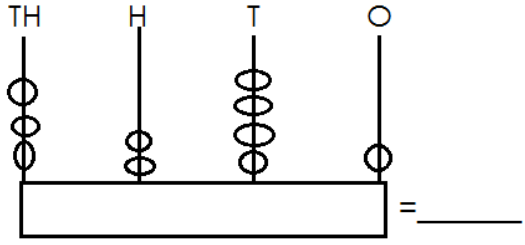


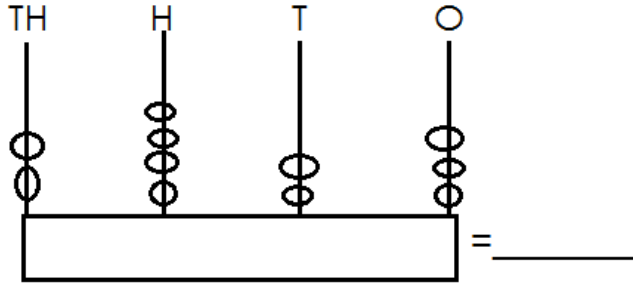
Activity

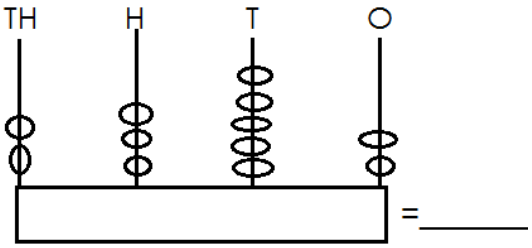
Write the number shown on the abacuses.

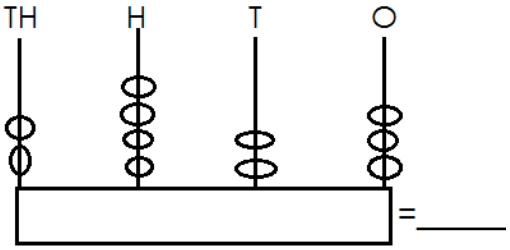
1. 

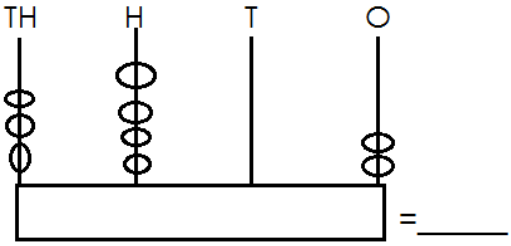
2. 

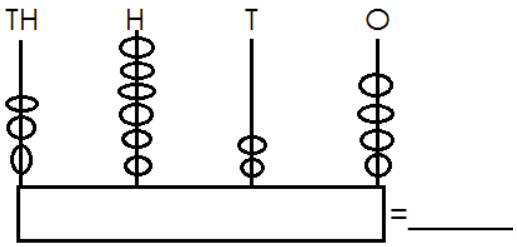
5. 

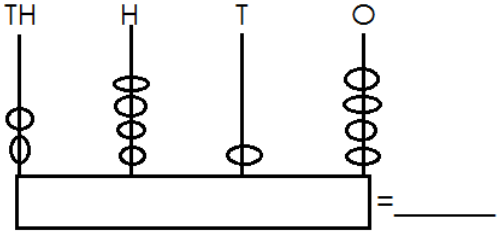
6. 

3. 

7. 

4. 

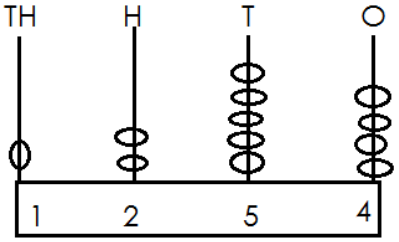
8. 

9. 

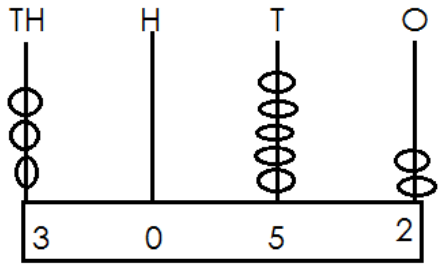
Drawing abacuses for the number

Examples

1. 1254 =



2. 3052 =



Activity

Show the following numbers on the abacuses

1. 1306
2. 9700
3. 7924
4. 8143
5. 5677
6. 6289
7. 8447
8. 6024
9. 8142
10. 5677

FILLING IN THOUSANDS, HUNDREDS, TENS AND ONES.

Examples

1. **9** thousands **4** hundreds **6** tens **0** ones

   =9460
2. 2478= **2** thousands **4** hundreds **7** tens **8** ones

Activity

Fill in thousands hundreds tens and ones

1. **7** thousands **2** hundreds **3** tens **6** ones =_____
2. **8** thousands/hundreds **6** tens **5** ones =_____
3. **6** thousands **7** hundreds **1** ten **2** ones =_____
4. **1** thousand **0** hundreds **0** tens **4** ones =_____
5. **2** thousands **0** hundreds **2** tens **0** ones =_____
6. **7214** =_____ thousands _____hundreds ____ tens ____ones
7. **696** =_____ thousands _____hundreds ____tens ____ones
8. **5218** =_____ thousands _____hundreds ____tens ____ones
9. **2020** =_____ thousands _____hundreds ____tens ____ones
10. **1995** =_____ thousands _____hundreds ____tens ____ones

MORE ON WRITING THOUSANDS, HUNDREDS, TENS AND ONES

Examples

1. **4** thousands **3** hundreds **2** tens **5** ones = **4325**
2. **6** thousands **5** hundreds **2** tens **0** ones = **6520**
3. **2875** = **2** thousands **8** hundreds **7** tens **5** ones
4. **7029**= **7** thousands **0** hundreds **2** tens **9**ones

Activity

Write thousands, hundreds, tens and ones

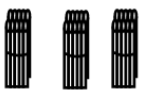
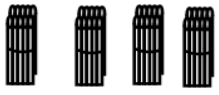
1. _____ thousands _____hundreds ____tens ____ones=1934
2. _____ thousands _____hundreds ____tens ____ones=7453
3. _____ thousands _____hundreds ____tens ____ones= 3200
4. _____ thousands _____hundreds ____tens ____ones= 1731
5. _____ thousands _____hundreds ____ tens ____ones=5527
6. _____= **1** thousand **4** hundreds **3** tens **7** ones
7. _____= **0** thousand **9** hundreds **4** tens **8** ones
8. _____= **4** thousand **2** hundreds **5** tens **2** ones
9. _____= **7** thousand **7** hundreds **2** tens **0** ones
10. _____= **8** thousand **0** hundreds **0** tens **0** ones

DRAWING BUNDLES OF THOUSANDS, HUNDREDS, TENS AND ONES

Examples

1. Draw bundles to represent 2342

TH	H	T	O
2	3	4	2 =

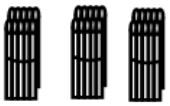
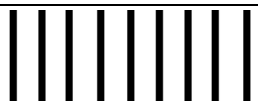
Th	H	T	O
2	3	4	2
			

2. Draw bundles to represent 215

H	T	O
2	1	5
		

3. Draw bundles to represent 39

T O
3 9 =

T	O
3	9
	

Activity

Draw bundles to represent

1. 13
2. 47
3. 123
4. 325
5. 1248
6. 246
7. 2290
8. 23
9. 1147

<u>WRITING NUMBERS IN WORDS</u>

<u>Note</u>: When reading numbers in words, read tens and ones together.

Examples

1. Write **48** in words

   48= forty eight

2. Write **219** in words

219 = two hundred nineteen

Activity

Write the following numbers in words

1. 14
2. 35
3. 96
4. 49
5. 421
6. 718
7. 199
8. 528
9. 500
10. 672

WRITING NUMBER WORDS IN FIGURES

Examples

1. Write ninety six in figures

   Ninety six =96

2. Write two hundred twelve in figure

   Two hundred=**200**

   Twelve= +**12**

   Two hundred twelve=212

3. Write eight hundred fifty in figures

   Two hundred= **200**

   Fifty = +**50**

   Two hundred fifty= **250**

Activity

Write number word in figures

1. three hundred thirty-four.
2. ninety-five
3. seven hundred fifty-three
4. eight hundred thirty-nine
5. seventy-three
6. four hundred sixty-seven

7. seven hundred forty-nine
8. eight hundred one
9. seventy-two
10. eleven

WRITING WHOLE NUMBER IN WORD

(Thousands, hundreds, tens and ones)

Note: when writing numbers in words read tens and one together

Examples

1. Write **2536** in words

TH	H	T	O
2	5	3	6

Two thousand five hundred thirty-six

2. Write **7212** in words

TH	H	T	O
7	2	1	2

Seven thousand two hundred twelve

3. Write **310**4 in words

TH	H	T	O
3	1	0	4

Three thousand one hundred four.

Activity

Write the following in words

1.	4718	6.	2538
2.	8000	7.	1840
3.	7049	8.	2116
4.	5399	9.	4009
5.	6411	10.	5234

Write number words in figures

Examples

1. Write two thousand five hundred thirty-six in figure

Two thousand= 2000

Five hundred= + 500

Thirty-six = 36

2536

2. Write seven thousand two hundred twelve in figures

Seven thousand = 7000

Two hundred = 200

Twelve = 12

7212

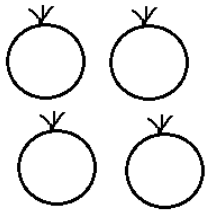
Activity

1. One thousand, six hundred thirty-six
2. One thousand, nine hundred fifteen.
3. Two thousand, six hundred four.
4. Three thousand four hundred fifty.
5. Nine thousand two hundred eleven.
6. Eight thousand seven hundred twenty.
7. Three thousand one hundred eighty-one
8. Five thousand two hundred nineteen.
9. One thousand
10. Three thousand six hundred seventy-nine.

NUMERALS

A numeral is a symbol that represents a number.

Example

Number	Numeral
	4

Types of numerals

1. Hindu Arabic numerals
2. Roman numerals

Hindu Arabic numerals

Examples of Hindu Arabic numerals

0,1,2,3,4,5,6,7,8,9……

ROMAN NUMERALS

These are numerals that were introduced by the Asians.

Types of Roman Numerals

(a) Major roman numerals

I	1
V	5
X	10
L	50
C	100

(b) Roman numerals got by repeating I or x

(i) Repeating.

2= I+I

=II

3=I + I +I

=III

(ii) By repeating X

20=X + X

=XX

30=X + X +X

=XXX

(c) **Roman numerals got by adding I, III, to v**

6=5+1

= VI

7= 5+2

VII

(d) **Roman numerals got by adding, I, ii, iii to x**

11= 10+1

= XI

12= 10+2

=X II

= XII

13=10+3

XIII

(e) **Roman numerals got by subtracting 1 from 5**

4=5-1

VI

Roman numerals got by subtracting

1 from 10

9=10-9

= IX

(g) **Roman numerals got by subtracting**

10 from 50

40=50-10

= XL

ROMAN NUMERALS FROM 1-50

1	I
2	II
3	III
4	IV
5	V
6	VI
7	VII

8	VIII
9	IX
10	X
11	XI
12	XII
13	XIII
14	XIV

15	XV
16	XVI
17	XVII
18	XVIII
19	XIX
20	XX
21	XXI
22	XXII
23	XXIII
24	XXIV
25	XXV
26	XVI
27	XVII
28	XVIII
29	XXIX
30	XXX
31	XXXI
32	XXXII

33	XXXIII
34	XXXIV
35	XXXV
36	XXXVI
37	XXXVII
38	XXXVIII
39	XXXIX
40	XL
41	XLI
42	XLII
43	XLIII
44	XLIV
45	XLV
46	XLVI
47	XLVII
48	CLVIII
49	XLIX
50	L

Changing Hindu Arabic to roman numerals

Examples

1. Change **7** to Hindu Arabic numerals

   7= 5+2

   = VII

   7= VII

2. Tony is **14** years old. Express his years in roman numerals.

   14 = 10 + 4

   14 = XIV

Activity

1. Change **9** to Roman numerals
2. Express **26** in Roman numerals
3. Change **48** to Roman numerals
4. There **7** days in a week. Express the days in Roman numerals.
5. John has **29** cows. How many cows does he have in Roman numerals?
6. Write **15** in Roman numerals.
7. Daniel weighs **42**kg. Express his weight in Roman numerals.
8. Change the following to Roman numerals

   (a) **8** (b) **15** (c) **24** (d) **39** (e) **12** (f) **28**

CHANGING ROMAN NUMERALS TO HINDU ARABIC NUMERALS

Examples

Note: expand and change to Hindu Arabic numerals

XIX

X	IX
10	9

= 10+9

= 19

2. Change IV to Hindu Arabic numerals

IV = 5 - 1

= 4

3. Jane is XXVI years old. Write her age in Hindu Arabic numerals

XXVI

XX	VI
20	6

= 20 + 6

= 26years

Activity

1. Change the following to Hindu Arabic numerals

   (a) **XXII** (b) **XXXV** (c) **VII** (d) **XLIII**

2. A boy walked a distance of VIII metres. Express the distance in Hindu- Arabic numerals.

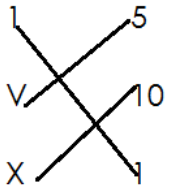
3. Mukisa weighs xix kilograms. Find his weight in Hindu-Arabic numerals.

4. An adult person has **XXXII** teeth. Express the teeth in Hindu -Arabic numerals.

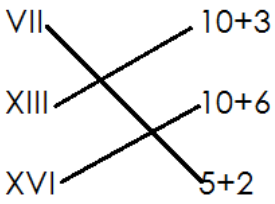
MATCHING ROMAN NUMERALS TO HINDU -ARABIC

Examples

Match Roman numerals to Hindu –Arabic



Study the numbers and match



Activity

Match roman numerals to Hindu - Arabic

1.

IV	9
VIII	19
IX	4
XIV	14
XXII	22
XIX	8

2.

VI	10+8
XI	20+5
XVI	5+1
XVIII	10+6
XIV	10+1
XXV	20+4

OPERATIONS ON WHOLE NUMBERS

Addition of number without regrouping/ carrying

Examples

1. Add 11+ 12

$$\begin{array}{rr|l} & 1 & 1 & 1+2=3 \\ + & 1 & 2 & \\ \hline & 2 & 3 & 1+1=2 \end{array}$$

2. Add 24+13

$$\begin{array}{rr|l} & 2 & 4 & 4+3=7 \\ + & 1 & 3 & \\ \hline & 3 & 7 & 2+1=3 \end{array}$$

3. Add:

$$\begin{array}{rr|l} & 4 & 3 & 3+6=9 \\ + & & 6 & \\ \hline & 4 & 9 & 4+0=4 \end{array}$$

<u>Activity</u>

Add the following

1. $\begin{array}{rr} & 2 & 1 \\ + & 1 & 5 \\ \hline & & \end{array}$

2. $\begin{array}{rr} & 2 & 2 \\ + & 5 & 0 \\ \hline & & \end{array}$

3. $\begin{array}{rr} & 2 & 3 \\ + & 1 & 5 \\ \hline & & \end{array}$

4. $\begin{array}{rr} & 2 & 6 \\ + & 1 & 1 \\ \hline & & \end{array}$

5. $\begin{array}{rr} & 2 & 7 \\ + & 2 & 0 \\ \hline & & \end{array}$

6. $\begin{array}{rr} & 2 & 7 \\ + & 3 & 0 \\ \hline & & \end{array}$

7. $\begin{array}{rr} & 3 & 7 \\ + & & 2 \\ \hline & & \end{array}$

8. $\begin{array}{rr} & 8 & 1 \\ + & & 7 \\ \hline & & \end{array}$

9. $\begin{array}{rr} & 9 & 3 \\ + & & 4 \\ \hline & & \end{array}$

10. $\begin{array}{rr} & 3 & 7 \\ + & 6 & 1 \\ \hline & & \end{array}$

11. $\begin{array}{rr} & 8 & 6 \\ + & 1 & 1 \\ \hline & & \end{array}$

12. $\begin{array}{rr} & 5 & 6 \\ + & 4 & 3 \\ \hline & & \end{array}$

WORD PROBLEMS INVOLVING ADDITION WITHOUT REGROUPING

Examples

1. Ashaba had 32 mangoes. She picked 17 more mangoes. How many mangoes did she have altogether?

Ashaba had----------3 2 mangoes
She picked more---1 7 mangoes
Total = 4 9

2. Wamanga made 24 pancakes. His friend gave him 30 more pancakes. How many pancakes did he have?

$$\begin{array}{r} 24 \text{ pancakes} \\ +\ 30 \text{ pancakes} \\ \hline 54 \text{ pancakes} \end{array}$$

Activity

1. Okot had **55** cows. His brother had **21** cows. How many cows did the two brothers have?
2. Ssalongo had **42** goats. Nalongo had **52** goats. How many goats did they have altogether?
3. Epeju had **14** goats. Nalumanssi had **72** goats. How many goats do they have altogether?
4. Agnes collected **43** mangoes and **12** oranges. How many fruits did she collect altogether?
5. Mabale had **38** eggs. Nambozo had **41** eggs. How many eggs did they have altogether?
6. Opio made **33** pots. His wife made **24** more pots. How many pots did they make altogether?
7. Acen picked **40** guavas and A can picked **7**. How many guavas did they pick altogether?

MORE ON ADDITION OF NUMBERS WITHOUT REGROUPING

Examples

1. Add: 1413+230

$$\begin{array}{r} 1413 \\ +230 \\ \hline 1643 \\ \hline \end{array}$$

2. Add: 542 + 22

$$\begin{array}{r} 542 \\ +\ 22 \\ \hline 564 \\ \hline \end{array}$$

3. Add: 151+224+100

$$\begin{array}{r|l} 151 & 5+2+0=7 \\ 224 & \\ +100 & 1+2+1=4 \\ \hline 475 & \\ \hline \end{array}$$

Activity

Read and workout

1. 1230+110
2. 2141+1402+5223
3. 11+130+340
4. 2143+321
5. 1582+6314
6. 246+422
7. 4264+1101+3413
8. 3492+307

MORE ON WORD PROBLEMS INVOLVING ADDITION OF NUMBERS WITHOUT REGROUPING.

Examples

1. James had **156** books. He got **221** more. How many books did he have altogether?

$$\begin{array}{r} 156 \text{ books} \\ +\ 221 \text{ books} \\ \hline 377 \text{ books} \\ \hline \end{array}$$

2. Our school had **2637** pupils last year. It received **7132** pupils this year. How many pupils are in the school now?

$$\begin{array}{r} 2637 \text{ pupils} \\ +\ 7132 \text{ pupils} \\ \hline 9769 \text{ pupils} \end{array}$$

Activity

1. Find the sum of **32453** and **41532**
2. Find the sum of sh **56321** and sh **23535**
3. Musa earns sh **63042** and Juliet earns **32416**. How much do both earn?
4. A district education officer gave **25204** books to schools in January and **30242** books in March. How many books were given out altogether?
5. A school A got **53107** books and school B got **41632** books. What is the total number of books which was given to the two school?
6. One parent donated sh **42463** to the school and another parent donated sh **43120**. What was the total amount of money donated to the school?
7. Add **42017** and **54301**.

ADDITION OF NUMBERS INVOLVING REGROUPING

Examples

Add the following

1. $$\begin{array}{r} {\scriptstyle 1}\ 3\ \ 5 \\ +\ \ 1\ \ 6 \\ \hline 5\ \ 1 \end{array}$$ 5+6=11

2. $$\begin{array}{r} {\scriptstyle 1}\ 4\ \ 9 \\ +\ \ \ \ 7 \\ \hline 5\ \ 6 \end{array}$$ 9+7=16

3. 7+9+5=

$$\begin{array}{r} 7 \\ +\ 9 \\ 5 \\ \hline \\ \hline \end{array}$$

Activity

Add the following numbers

1.

$$\begin{array}{r} 5\ \ 6 \\ +\ 1\ \ 7 \\ \hline \\ \hline \end{array}$$

8+9+8=

$$\begin{array}{r} 5\ \ 7 \\ +\ 1\ \ 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8\ \ 9 \\ +\ 6\ \ 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 9\ \ 9 \\ +\ \ \ 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \ \ 8 \\ +\ 4 \\ 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8\ \ 6 \\ +\ 2\ \ 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3\ \ 6 \\ +\ 6\ \ 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4\ \ 4 \\ +\ 1\ \ 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3\ \ 3 \\ +\ 8\ \ 9 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6\ \ 5 \\ +\ \ \ 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8\ \ 9 \\ +\ \ \ 5 \\ \hline \\ \hline \end{array}$$

MORE ON ADDITION OF NUMBERS INVOLVING REGROUPING

Examples

1. Add: 3456+4538

$$\begin{array}{r} 3\,4\,5\,6 \\ +\ 4\,5\,3\,8 \\ \hline 7\,9\,9\,4 \\ \hline \end{array}$$

6+8=14
1+5+3=9
4+5=9
3+4=7

2. Add: 323 + 24 6 + 453

```
  3 2 3   | 3+6+3=12
+ 2 4 6   |
  4 5 3   | 2+4+5+1=12
  1 0 2 2 |
          | 1+3+2+4=10
```

3. Add: 345 + 96

```
    1 1   | 5+6=11
  3 4 5   |
+   9 6   | 1+4+9=14
  4 4 1   |
          | 1+3=4
```

Activity

Add the following numbers

1. 1684+ 1469 =
2. 267+69 =
3. 5834+2487 =
4. 899+27 =
5. 1574+188 =
6. 2853 +987 =
7. 1876+2547 =
8. 582+49 =

WORD PROBLEMS INVOLVING ADDITION OF NUMBERS WITH REGROUPING

Example

1. Juma had **4156** books. He got **786** more books. How many books did he have altogether?

Solution

```
          1 1
James had------- 4 1 5 6 books
He got---------- + 7 8 6 books
-----------------------------
          4 9 4 2 books
```

Activity

Read and add

1. Find the sum of **496** and **174**
2. What is the sum of **24, 37** and **425**?
3. What is **4798** plus **3362**?
4. A train carried **120** children **236** men and **325** women. How many people did it carry altogether?
5. A farmer has **494** cows and 847 sheep. How many animals does he have altogether?
6. Our school had **639** pupils last year. It received **97** more pupils this year. How many pupils are in the school altogether?
7. A village had **4837** men and **7246** girls. How many people are in the village altogether?
8. Agnes had **790** bags of millet Joan had **1724** bags and rose had **365** bags. How many bags do they have altogether?

SUBTRACTION OF NUMBERS WITHOUT REGROUPING

Examples

1. Subtract:

$$\begin{array}{r} 4\ 4 \\ -\ 3\ 1 \\ \hline 1\ 3 \end{array}$$

4-1=3

4-3=1

2. Subtract:

$$\begin{array}{r} 3\ 4\ 0 \\ -\ \ \ 1\ 0 \\ \hline 3\ 3\ 0 \end{array}$$

0-0=0

4-1=3

Activity

Subtract the following numbers.

1. $\begin{array}{r} 2\ 8 \\ -\ 1\ 3 \\ \hline \end{array}$

2. $\begin{array}{r} 4\ 4 \\ -\ 1\ 3 \\ \hline \end{array}$

3. $\begin{array}{r} 4\ 8 \\ -\ 1\ 5 \\ \hline \end{array}$

4. $\begin{array}{r} 4\ 7 \\ -\ 1\ 2 \\ \hline \end{array}$

5. $\begin{array}{r} 4\ 5\ 0 \\ -\ \ 2\ 0 \\ \hline \end{array}$

6. $\begin{array}{r} 6\ 2\ 4 \\ -\ \ 1\ 1 \\ \hline \end{array}$

7. 999 - 89

8. 72 - 30

9. 424 - 14

10. 1324 - 112

WORD PROBLEMS INVOLVING SUBTRACTION OF NUMBERS WITHOUT REGROUPING

Examples

1. There were **24** mangoes in a box **13** of them got rotten. How many mangoes are still good?

   There were 2 4 mangoes
   - 1 3 got rotten
   1 1 still good

2. Kapere has **298** sheep. His wife has **121** sheep. What is the difference between their number of sheep?

   Kapere has 2 9 8 sheep
   His wife has 1 2 7 sheep
   Difference 1 7 1 sheep

Activity

Read and subtract

1. What is the difference between **94** and **61**?
2. Find the difference between sh. **970** and sh. **250**?
3. Sandra had **65** cows. She sold off **35** cows. How many cows were left?
4. There are **186** cars in a hire. **80** of them were red in colour. How many cars were not red in colour?
5. Subtract**474** from **997**.
6. Subtract **57**kg from **689**kg.
7. Mukasa bought **780** crates of soda. He sold **480** crates. How many crates remained?
8. A farmer packed **738** litres of milk 615 liters were sold. How many litres were not sold?

MORE ON SUBTRACTION OF NUMBERS WITHOUT REGROUPING

Examples

Subtract:

1.

3	6	4	2
-	3	2	1
3	3	2	1

2-1=1
4-2=2
6-3=3

2. Workout:

6	3	9	4
-4	1	0	3
2	2	9	1

4-3=1
9-0=9
3-1=2
6-4=2

Activity

Work out the following

1.

2	4	3	2
-1	3	1	1

2.

3	6	4	5
-2	1	4	1

3.

4	8	0	4
- 3	5	0	3

4.

5	6	7	2
-2	4	1	0

5.

7	3	6	5
-4	1	2	3

6.

8	6	3	7
-7	3	1	6

7.

8	4	2	7
- 5	4	1	5

8.

7	3	9	2
-	1	3	0

MORE ON WORD PROBLEMS

Examples

1. Sarah had **1769** hens. She sold **460** hens. How many hens remained?

Sarah had	1 7 6 9 hens	9-0=9
She sold	- 6 4 0 hens	
She remained with	1 1 2 9 hens	6-4=2
		7-6=1

2. Find the difference between sh. 4500 and sh. 3500.

sh. 4500	0-0=0
sh. 3500	0-0=0
sh. 1000	5-5=0
	4-3=1

3. Subtract: 5865 - 1342

5 8 6 5	5-2=3
- 1 3 4 2	6-4=2
4 5 2 3	8-3=5
	5-1=4

Activity

Read and workout

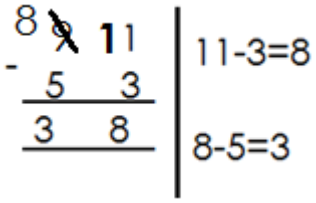
1. Mugga had **1667** chicks. He sold off **441** chicks. How many chicks did he remain with?
2. What is the difference between **8456** and **3214**?
3. In a village of **8652** people, **6231** were females. How many males are there?
4. A teacher had **5720** pencils and she gave **3220** pencils to the pupils. How many pencils did she remain with?
5. There were **9729** eggs in the basket and **2315** of them got broken. How many eggs were left?
6. A carpenter made **2964** desks and he sold **350** desks. How many desks were left?
7. Subtract **456** from **9697**.
8. Workout the difference between **2440** years and **2020** years.

SUBTRACTION OF NUMBERS WITH REGROUPING

Examples

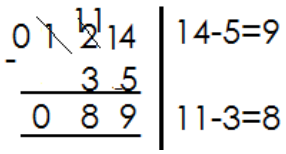
1. Subtract: 91-53

Solution

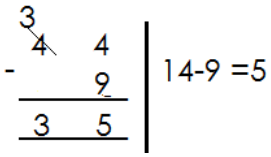


2. Subtract: 124-35

Solution



3. Subtract 44-9



Activity

Subtract the following numbers

1.	94-6	6.	897-29
2.	82-7	7.	568-278
3.	95-17	8.	935-277
4.	84-39	9.	629-79
5.	413-144	10.	811-245

WORDS PROBLEMS INVOLVING SUBTRACTION OF NUMBERS WITH REGROUPING

Key words

- Difference
- Takeaway
- Remain
- Reduce
- Left
- remove
- less
- subtract
- minus
- gave away

Examples

1. Subtract 53 from 91

$$\begin{array}{r} {}^{8}\cancel{9}\ {}^{11}1 \\ -\ 5\ \ 3 \\ \hline 3\ \ 8 \end{array}$$

11-3=8

8-5=3

2. What is left when I remove 116 from 423?

$$\begin{array}{r} 4\ {}^{1}\cancel{2}\ 13 \\ -\ 1\ \ 1\ \ 6 \\ \hline 3\ \ 0\ \ 7 \end{array}$$

13-6=7

1-1=0

4-1=3

3. Remove 35 from 124

$$\begin{array}{r} 0\ {}^{11}\cancel{1}\ {}^{1}\cancel{2}\ 14 \\ -\ \ 3\ \ 5 \\ \hline 0\ \ 8\ \ 9 \end{array}$$

14-5=9

11-3=8

Activity

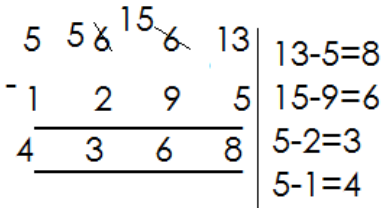
Read and subtract

1. What is the difference between **653** and **175**?
2. Take away **87** from **199**.
3. Find the difference between **376** and **297**.
4. A boy did **400** numbers and failed **130** numbers. How many numbers did he get correct?
5. By how much is **851kg** greater than **364kg**?
6. Kabundi had sh. **500**. He gave away some to Andrew leaving sh. **250.** How much money did he give away?
7. Remove **93** from **231.**
8. Mwanje had **413** books. He removed **175** of them and gave them to Mr. Lindo. How many remained?

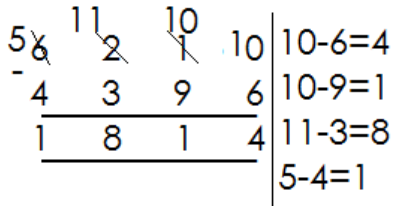
MORE ON SUBTRACTION INVOLVING REGROUPING

Examples

1. Subtract: **5663** - **1295**



2. Subtract: **6210** - **4396**



Activity

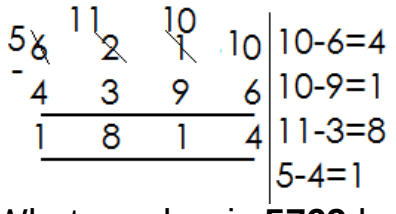
Subtract the following numbers

1.	3664 - 1395	4.	7683 - 2799	8.	8504 - 7694
2.	9564 - 5362	5.	9500 - 5769	9.	8330 - 6879
3.	9058 - 3749	6.	3541 - 1021	10.	6210 – 4396

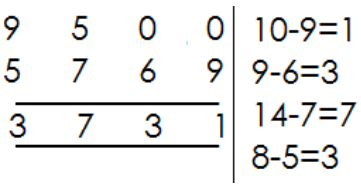
WORD PROBLEMS INVOLVING SUBTRACTION OF NUMBERS WITH REGROUPING

Examples

1. Reduce **1776** by **469**



2. What number is **5769** less than **9500**?



3. Safina bought 4750 bottles of soda. She sold 1965 bottles. How many were left?

Solution

	4	7	5	0 bottles	10-5=5
-	1	9	6	5 bottles	14-6=8
	2	7	8	5 bottles	16-9=7
					3-1=2

Activity

Read and workout

1. Subtract **3248** from **7368**.
2. Reduce **4232** by **2186**.
3. What number is **4397** less than **5642**?
4. A farmer had **4075** litres of milk **3986** litres were sold. How many litres remained?
5. Sudhir imported **3568** bicycles. He gave away **1698** bicycles to other traders. How many bicycles did he remain with?
6. Betty was born in **1997**. How old was she in **2005**?
7. In a class of **1205** pupils, **987** are boys. How many are girls?

MULTIPLICATION OF WHOLE NUMBERS

Multiplying numbers by 0

Examples

1. Multiply 8x0

   8 x 0

   = 0

2. Multiply 14 x 10

   14 x 0

   = 0

Note: When we multiply a number by 0 or o by a number, the answer is 0.

Activity

Multiply the following

1. 9 x 0
2. 10 x 0

3. 17 x 0
4. 144 x 0
5. 0 x 21
6. 37 x 0
7. 0 x 412
8. 111 x 0
9. 83 x 0
10. 100 x 0
11. 0 x 2

WORKING OUT MULTIPLICATION USING REPEATED ADDITION

Multiplication is repeated addition

Examples

1. Workout **4 x 6** using repeated addition

   4 x 6 means four groups of six or four sixes

   4 6

   = 6 + 6 + 6 + 6

   = 24

2. Simplify 3x7 using repeated addition

   3 x 7

   = 7 + 7 + 7

   = 21

Activity

A. Workout the following using repeated addition

1. 4 x 2
2. 6 x 5
3. 2 x 8
4. 3 x 9
5. 7 x 8
6. 5 x 3
7. 8 x 4
8. 5 x 9
9. 9 x 4
10. 10 x 6

B. Workout addition statement using multiplication

a. 4 + 4 + 4

b. 6 + 6 + 6 + 6

c. 3 + 3 + 3 + 3 + 3 + 3 + 3

d. 7 + 7

e. 9 + 9 + 9

f. 5 + 5 + 5 + 5 + 5 + 5

g. 8 + 8 + 8 + 8 + 8

SIMPLE MULTIPLICATION

Multiplying one by one-digit numbers.

Examples

Multiply

a. 3 x 2

6

2+2+2

b. 9 x 7

9 x 7

63

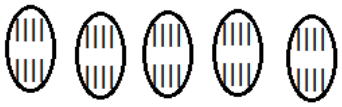
7+7+7+7+7+7+7+7+7

c. 5 x 8

5 x 8

= 40

8+8+8+8+8



Activity

Multiply the following numbers

1. 3 x 9
2. 4 x 7
3. 2 x 3
4. 1 x 5
5. 7 x 6
6. 9 x 7
7. 8 x 3
8. 6 x 2

9. 5 x 7

10. 9 x 1

11. 4 x 8

12. 8 x 2

WORD PROBLEMS INVOLVING MULTIPLICATION OF NUMBERS

Key words

- Multiply - multiple
- Times
- Product

Examples

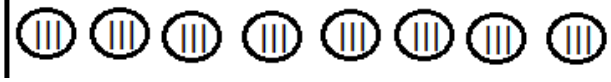
1. A spider has **8** legs. How many legs do **3** spiders have?

Solution

One spider has **8** legs

3 spiders have (**8 x 3**) legs

3+3+3+3+3+3+3+3



= 24 legs

2. 1 book costs sh. 700. Find the cost of 4 similar books

Solution

1 book costs sh. 700

4 books cost sh. 700 x 4

sh 700	4x0=0
x 4	4x0=0
sh 2800	4x7=28

Activity

1. A pupil walks **3**km every day. How km does the pupils cover in **9** days?
2. A home uses **9** litres of milk a day. How many litres does the home use in **8** days?
3. A car has **8** wheels. How many wheels are there on **7** cars?
4. A car carries6 people. How many people are carried by **9** cars?
5. One pen costs sh. **900**. Find the cost of **5** pens.
6. One book has **8** pages. How many pages do **6** similar books have?

7. What is the product of **6** and **7**?

8. **3kg** of sugar were given to each family. If there were **9** family. How many kilograms were given out altogether?

9. Multiply **8** by **3**.

MULTIPLICATION OF 2 DIGIT NUMBER BY 1 DIGIT WITHOUT CARRYING

Examples.

1. **Multiply 10 x 5**

$$\begin{array}{r} 10 \\ \times\ 5 \\ \hline 50 \end{array}$$

5x0=0
5x1=5
1+1+1+1+1

2. **Multiply 13 x 3**

$$\begin{array}{r} 13 \\ \times\ 3 \\ \hline 39 \end{array}$$

3x3=3+3+3=9

3x1=1+1+1=3

3 .**Multiply 32 x 3**

$$\begin{array}{r} 32 \\ \times\ 3 \\ \hline 96 \end{array}$$

3x2=2+2+2

3x3=3+3+3

Activity

Multiply the following

1. 24 x 3
2. 30 x 3
3. 20 x 4
4. 14 x 2
5. $\begin{array}{r} 41 \\ \times\ 2 \\ \hline \\ \hline \end{array}$
6. $\begin{array}{r} 32 \\ \times\ 3 \\ \hline \\ \hline \end{array}$
7. $\begin{array}{r} 42 \\ \times\ 2 \\ \hline \\ \hline \end{array}$
8. $\begin{array}{r} 33 \\ \times\ 3 \\ \hline \\ \hline \end{array}$
9. $\begin{array}{r} 30 \\ \times\ 2 \\ \hline \\ \hline \end{array}$

WORD PROBLEMS INVOLVING MULTIPLICATION OF 2 DIGIT NUMBER BY 1 DIGIT WITHOUT REGROUPING.

Examples

1. One year has **12** months. How many months are in **4** years?

Solution

1 year_____12 months

4 years--------- (12x4) months

1	2	4x2=8
x	4	
4	8	4x1=4

4 years have **48** months.

2. What is the product of **13** and **3**?

Solution

13x3

1	3	3x3=3+3+3=9
x	3	
3	9	3x1=3

Activity

1. A car has **4** wheels. How many wheels are there on **20** cars?
2. One set contains **12** pencils. How many pencils do **4** similar sets contain?
3. A stool has **3** legs. How many legs do **33 s**tools have?
4. What is the product of **42** and **3**?
5. Multiply **30** by **4**
6. How many days are in **11** weeks?
7. There are **5** books in a box. How many books are there in **30** boxes?
8. A school uses **102** boxes of chalk in a month. How many boxes use in **4** months?

MULTIPLICATION OF 2 BY 1 DIGITS WITH REGROUPING

Examples

1. Multiply 16 x4

$$\begin{array}{r} 1\ 6 \\ \times\ \ 4 \\ \hline 6\ 4 \\ \hline \end{array}$$

6x4=4+4+4+4+4+4=24

1x4=4
4+2=6

2. Multiply: 18x5

$$\begin{array}{r} 1\ 8 \\ \times\ \ 5 \\ \hline 9\ 0 \\ \hline \end{array}$$

5x8=8+8+8+8+8=40

5x1=5
5+4=9

3. Multiply 45 x5

$$\begin{array}{r} 4\ 5 \\ \times\ \ 5 \\ \hline 2\ 2\ 5 \\ \hline \end{array}$$

5x5=5+5+5+5+5=25

5x4=4+4+4+4+4+4
=20+2
=22

Multiply the following

1. $\begin{array}{r} 2\ 5 \\ \times\ \ 5 \\ \hline \\ \hline \end{array}$

2. $\begin{array}{r} 3\ 8 \\ \times\ \ 5 \\ \hline \\ \hline \end{array}$

3. $\begin{array}{r} 1\ 3 \\ \times\ \ 5 \\ \hline \\ \hline \end{array}$

4. $\begin{array}{r} 4\ 9 \\ \times\ \ 5 \\ \hline \\ \hline \end{array}$

5. $\begin{array}{r} 2\ 1 \\ \times\ \ 5 \\ \hline \\ \hline \end{array}$

6. $\begin{array}{r} 4\ 3 \\ \times\ \ 5 \\ \hline \\ \hline \end{array}$

7. $\begin{array}{r} 1\ 8 \\ \times\ \ 5 \\ \hline \\ \hline \end{array}$

8. $\begin{array}{r} 3\ 4 \\ \times\ \ 5 \\ \hline \\ \hline \end{array}$

9. $\begin{array}{r} 1\ 4\ 0 \\ \times\ \ \ 4 \\ \hline \\ \hline \end{array}$

10. $\begin{array}{r} 5\ 5 \\ \times\ \ 4 \\ \hline \\ \hline \end{array}$

11. $\begin{array}{r} 4\ 9 \\ \times\ \ 4 \\ \hline \\ \hline \end{array}$

12. $\begin{array}{r} 2\ 7 \\ \times\ \ 5 \\ \hline \\ \hline \end{array}$

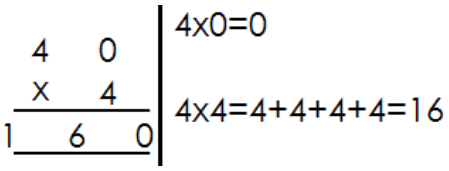
WORD PROBLEMS INVOLVING MULTIPLICATION WITH REGROUPING

Examples

1. Alice sells **40kg** of sugar every day. How many kgs are sold in **4** days?

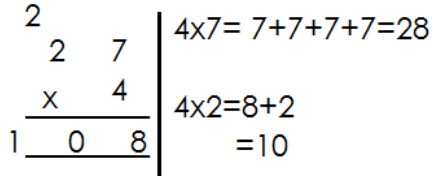
   In **1** day, she sells------ **40** kgs

   In **4** days, she sells-------**40kg x 4**



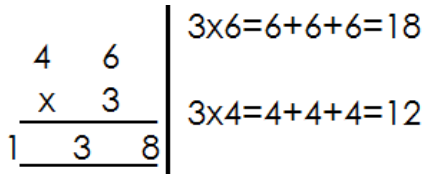
2. What is the product of **27** and **4**?

   27 x 4



3. Multiply **46** by **3**

   46 x 3



Activity

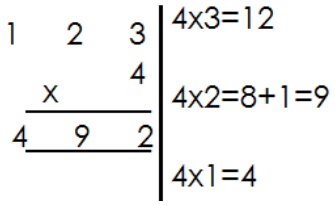
Read and multiply

1. One box holds **18** plates. How many plates will **7** boxes hold?
2. There are **84** stools with **3** legs each. What is the total number of legs?
3. One car carries **65** bags. How many bags do **5** cars carry?
4. What is the product of 148 and 5?
5. Multiply **23** by **5**?
6. **14** boxes are arranged in one line. If there are **9** lines. How many boxes are there altogether?
7. Multiply **507** by **6**
8. One cow has **4** legs. How many legs do **25** cows have?
9. Eight buses were used to take children for a trip. Each bus carried **32** pupils. How many pupils went for the trip?

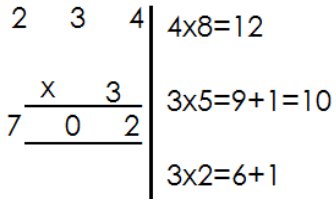
MULTIPLYING 3 BY 1 DIGIT WITH REGROUPING

Examples

1. Multiply: 23 x 4



2. Multiply: 234 x 3



Activity

Multiply the following

1. 1 5 6 x 2 =

2. 2 3 4 x 7 =

3. 1 2 4 x 6 =

4. 1 6 3 x 2 =

5. 2 3 1 x 6 =

6. 2 4 5 x 4 =

7. 1 3 8 x 2 =

8. 3 2 4 x 3 =

9. 1 4 4 x 7 =

MULTIPLY 4 DIGIT NUMBER BY 1 DIGIT WITH REGROUPING

Examples

1. Multiply: 1103 x 5

	1	1	10	3
x				5
5	5	1	5	

5x3=15

5x0=0+1=1
5x1=5
5x1=5

2. Multiply: 1057 x 2

	1	0	5	7
x				2
2	1	1	4	

2x7=14
2x5=10+1=11
2x0=0+1=1
2x1=2

Activity

Multiply the following

1. 2004 x 2 =

2. 3112 x 4 =

3. 3221 x 5 =

5. 1036 x 3 =

6. 1234 x 4 =

7. 3110 x 6 =

4. 1104 x 6 =

6. 3212 x 5 =

DIVISION OF WHOLE NUMBERS

Dividing numbers using repeated subtraction

Examples

Workout **12 ÷ 3** using repeated subtraction

12 ÷ 3
12 - 3 =9
9 - 3 = 6
6 – 3 = 3
3 – 3 = 0
4 times of subtraction
Therefore 12 ÷ 3 =4

2. Use repeated subtraction to workout
   28 ÷ 4
   28 ÷ 4
   28 – 4 = 24
   24 – 4 = 20
   20 – 4 = 16
   16 – 4 = 12
   12 – 4 = 8
   8 - 4 = 4
   4 – 4 = 0
   7 times of subtraction
   Therefore 28 ÷ 4=7

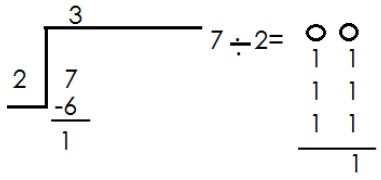
Activity

Workout the division statement below using repeated subtraction

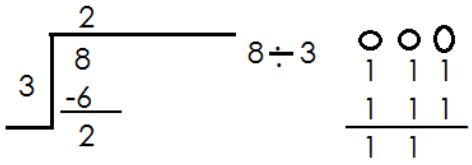
1. 9 ÷ 3
2. 10 ÷ 5
3. 20 ÷ 4
4. 18 ÷ 3
5. 27 ÷ 3
6. 40 ÷ 5
7. 50 ÷ 10
8. 36 ÷ 4
9. 15 ÷ 3
10. 12 ÷ 3

DIVIDING 1 DIGIT NUMBER BY 1 DIGIT NUMBER USING LONG DIVISION WITH REMAINDERS

Examples

1. 

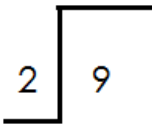
Therefore 7 ÷ 3=3 remainder 1

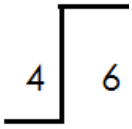
2. 

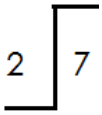
Therefore 8÷3= 2 remainder 2

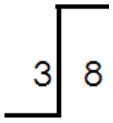
Activity

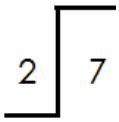
Divide numbers with remainders

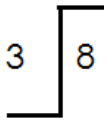
1. 

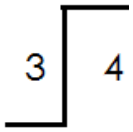
2. 

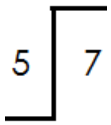
3. 

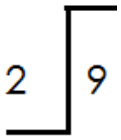
4. 

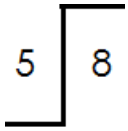
5. 

6. 

7. 

8. 

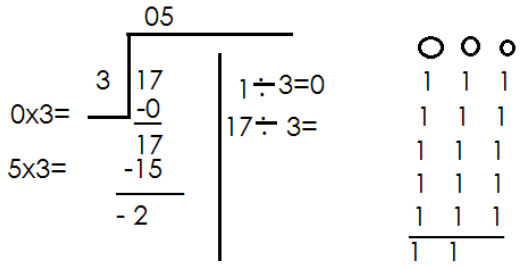
9. 

10. 

DIVIDING 2 DIGIT NUMBER BY 1 DIGIT NUMBER WITH REMAINDERS

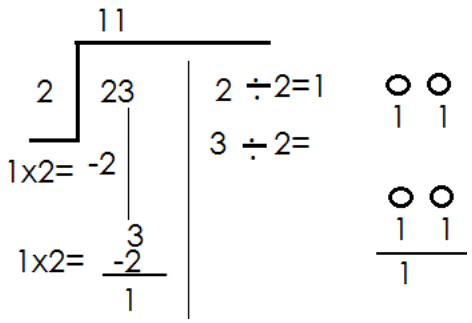
Examples

1. Divide: 17 ÷ 3



Therefore 17÷ 3=5 remainder 2

2. Divide 23 ÷ 2



Therefore 23 ÷ 2 = 11 remainder 1

Activity

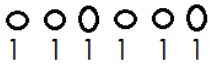
Divide the numbers with remainders

1. 2 | 15
2. 3 | 19
3. 3 | 28
4. 4 | 17
5. 5 | 11
6. 3 | 34
7. 7 | 20
8. 5 | 12
9. 2 | 13
10. 4 | 25

DIVIDING 1 DIGIT NUMBER BY 1 DIGIT WITHOUT REMAINDERS

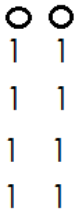
A. Without using long division

1. Divide: 6 ÷ 6

   6 - 6 

   =1

2. Divide: 8 ÷ 2

   8 ÷ 2 

   = 4

   Activity

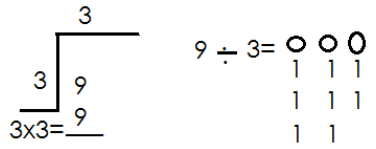
   Divide without using long division

   1. 9 ÷ 3
   2. 6 ÷ 2
   3. 5 ÷ 5
   4. 4 ÷ 2
   5. 6 ÷ 3
   6. 8 ÷ 4
   7. 4 ÷ 2
   8. 7 ÷ 7
   9. 9 ÷ 3
   10. 8

B. **Using algorithm method(long division sign)**

Examples

1. Divide: 9 ÷ 3



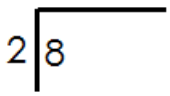
9 ÷ 3 = 3

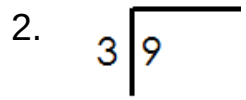
2. Divide: 4 ÷ 4

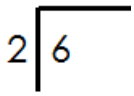
4 ÷4 =1

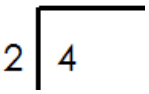
Activity

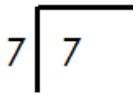
Divide 1 by 1 without remainders using long division.

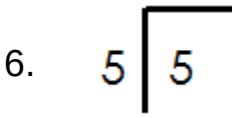
1. 

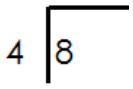
2. 

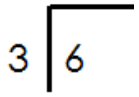
3. 

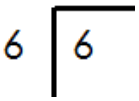
4. 

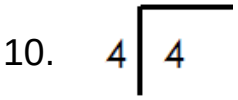
5. 

6. 

7. 

8. 

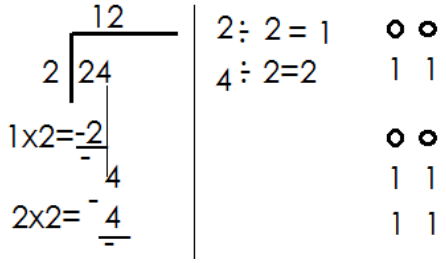
9. 

10. 

DIVIDING 2 DIGIT NUMBER BY 1 DIGIT NUMBER WITHOUT REMAINDER USING LONG DIVISION

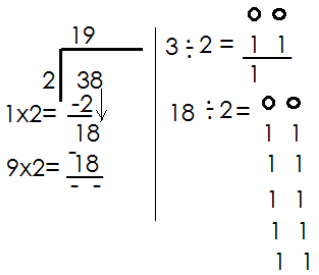
Examples

1. Divide: 24 ÷ 2



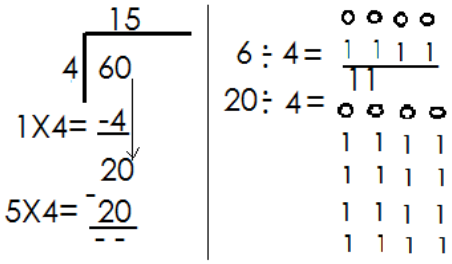
Therefore 24 ÷ 2=12

2. **Divide:** 38 ÷ 2 = 19



Therefore 38 ÷ 2=19

3. Divide: 60 ÷ 4 = 15



Therefore 60 ÷ 4 =15

Activity

Divide the following using long division

1. $2\overline{)32}$
2. $2\overline{)52}$
3. $5\overline{)90}$
4. $5\overline{)70}$
5. $5\overline{)85}$
6. $4\overline{)64}$
7. $2\overline{)72}$
8. $4\overline{)76}$

WORD PROBLEMS INVOLVING DIVIDING 2 DIGIT NUMBER BY 1 DIGIT NUMBERS.

Key words

Divide

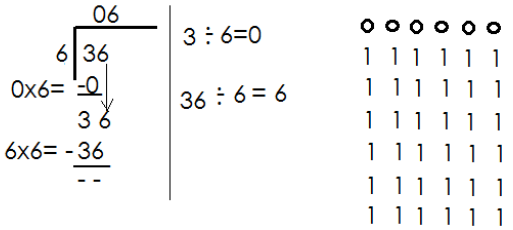
Share

Quotient

Examples

1. Share 36 pens equally among 6 pupils

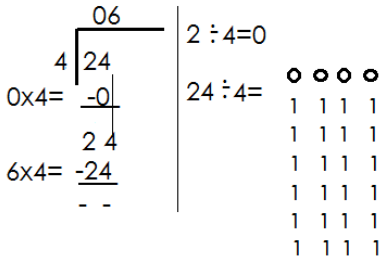
36 ÷ 6



Each pupil gets **6** pens

2. Share **24** balls equally among **4** schools. How many does each school get?

24 balls ÷ 4



Each school gets 6 balls

Activity

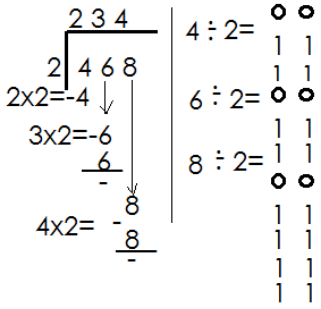
1. Share **12** oranges among **3** children. How many does each child get?
2. Divide **45** by **5**
3. What is the quotient of **76** and **2**?
4. Divide **54** by **3**
5. There were **42** desks to be shared equally among **3** classes. How many did each class get?
6. Lumonde got **55** eggs from his farm. If each hen laid **7** eggs, how many hens does he have?

7. How many weeks are in **35** days?
8. Find he quotient of **60** and **3**.
9. Share **18** cups equally between two girls. How many does each get?
10. Musoke had **20** pencils had shared them equally among **5** boys. How many did each boy get?

DIVIDING 3 DIGIT BY 1 DIGIT WITHOUT REMAINDER

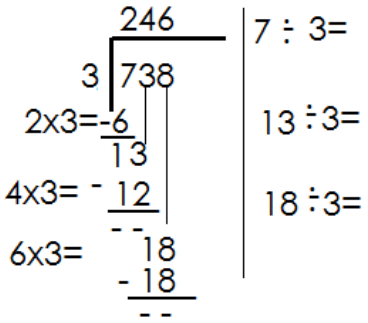
Examples

1. Divide: 468 ÷ 2



Therefore 468 ÷2=234

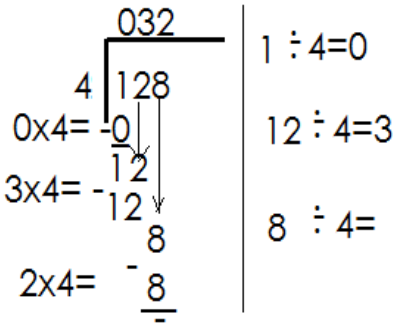
2. Divide: 738 ÷ 3



Therefore 738 ÷ 3=246

3. Divide: 128 ÷ 4.

Ther



Divide the following

1. $5\overline{)140}$

2. $3\overline{)180}$

3. $3\overline{)123}$

4. $3\overline{)144}$

5. $8\overline{)416}$

6. $9\overline{)513}$

7. $2\overline{)304}$

8. $2\overline{)202}$

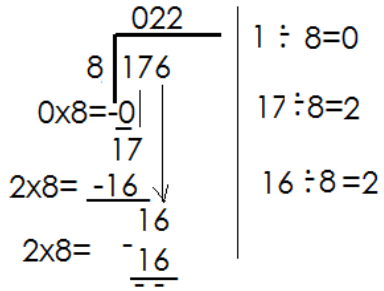
9. $4\overline{)116}$

WORD PROBLEMS INVOLVING DIVIDING 3 BY 1 DIGIT NUMBERS

Examples

1. Share **176** books equally among **8** streams. How many books does each stream get?

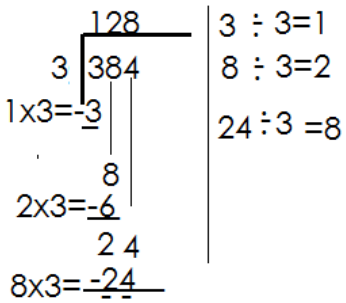
176 books ÷ **8**



Each stream gets 22 books.

2. Find the quotient of 384 and 3

384 ÷ 3



Therefore, the quotient of 384 and 3 is 128.

Activity

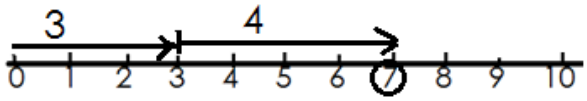
1. Divide 145 ÷ 5
2. What is the quotient of 252 and 7?
3. Divide **318** by **3**
4. A box contained **505** pencils to be given to 5 schools. How many pencils did each school get?
5. **128** sweets are to be shared equally to **8** children. What does each get?
6. There were **434** desks to be shared among **7** classes. How many desks did each get?

ADDING NUMBERS USING A NUMBER LINE

Examples

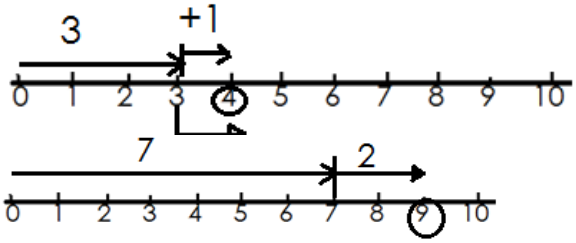
1. Add **3 + 4** using a number line

3 + 4 = 7



2. Use a number line to add **3 + 1**

3 +1 = 4

3. 

Add the following numbers using a number line

1. 2 + 4 =
2. 0 + 4 =
3. 1 + 5 =
4. 4 + 4 =
6. 1 + 3 =
7. 6 + 5 =
8. 6 + 2 =
9. 8 + 2 =

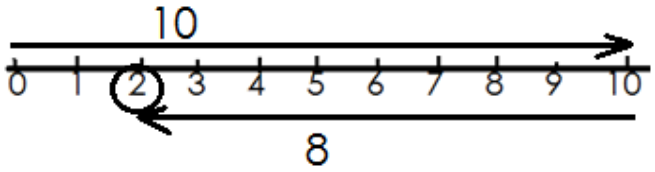
5. 8 + 1 = 10. 1 + 7 =

SUBTRACTING NUMBERS USING A NUMBER LINE.

Examples

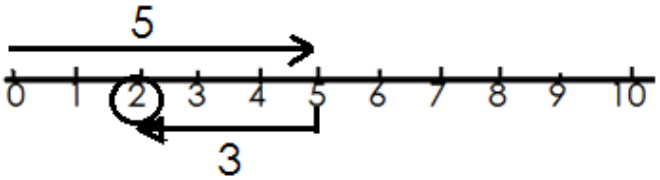
1. Subtract **8** from **10** using a number line

   10 – 8 = 2



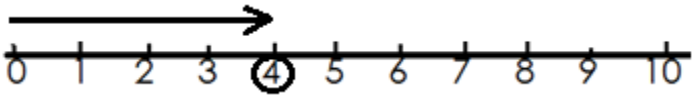
2. What is 5-3 using a number line

   5 – 3 = 2



3. Use a number line to subtract 4-0

   4 – 0 = 4



Activity

Use a number line to subtract the following numbers

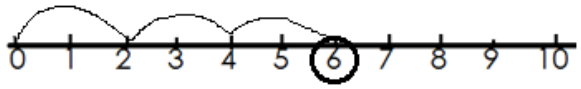
1. 6 – 3 = 6. 11 – 7 =
2. 10 – 7 = 7. 5 – 4 =
3. 4 – 1 = 8. 9 – 3 =
4. 7 – 2 = 9. 6 – 5 =
5. 12 – 8 = 10. 3 – 1 =

MULTIPLYING 1 DIGIT NUMBER BY 1 DIGIT NUMBER USING A NUMBER LINE

Examples

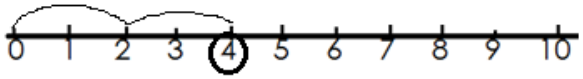
1. Workout **3 x 2** on a number line

3 x 2 = 6



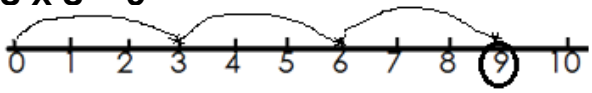
2. Multiply **2 x 2** using a number line.

2 x 2 = 4



3. What is 3x3 on a number line?

3 x 3 = 9



Activity

Multiply the following numbers using number lines

1. 5 x 2 =
2. 1 x 6 =
3. 3 x 4 =
4. 3 x 2 =
5. 6 x 2 =
6. 1 x 4 =
7. 6 x 2 =
8. 1 x 7 =
9. 4 x 2 =
10. 2 x 2 =

PATTERNS AND SEQUENCES

Even numbers;

Are numbers that have no remainder when divided by 2

i.e. 2, 4, 6, 8, 10, 12, 14, 16, _____

Odd numbers

Odd numbers are numbers that cannot be exactly divided by 2.

i.e. 1.3,5, 7, 9, 11, 13, 15, 17, _____

NB. 3 ÷ 2 = 1 remainder1

Reference: Understanding math bk 3 pg 40.

Mk Maths bk 4 pg 58- 63.

Primary maths for Uganda bk 3 page 80.

Exercise

1. Complete correctly.

a) 1, 3, 5, __, __, ___, ___

b) 5, __, ___, ___, ____

c) 7, 9, __, ___, ___, ____

d) 11, 13, 15, __, ___, ___, ___

e) 11, 9, 7, __, ___, ____

COUNTING OR NATURAL NUMBERS

Counting numbers are numbers we use to count.

They include; 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13…

Whole numbers

Whole numbers are counting numbers that include 0.

Example: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13,

References: understanding maths Bk. 3 pg. 40

MK maths BK. 4 PG. 58 – 63

Primary maths for Uganda Bk. 3 pg. 80

Exercise

1. Fill in correctly.

a) 0, 1, 2, 3, 4, ___,____ b) 2, 3, 4, 5, __,__

MULTIPLES OF NATURAL NUMBERS

Learning activity

A multiple is a result of multiplying a given number by another counting number.

Keep adding a given number to the result to get the next number.

Multiples of;

2. M_2 = {2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22…}

4. M_4 = {4, 8, 12, 16, 20, 24, 28, 32, 36, 40 …}

10. M_{10} = {10, 20, 30, 40, 50, 60, 70, 80...}

Exercise

Find the multiples of the following.

a) 3 b) 5 c) 6

FINDING LCM

Find the L.C.M of 2 and 3

M_2 = {2, 4, 6, 8, 10, 12…}

M_3 = {3, 6, 9, 12, 15 …}

LCM of 2 and 3 = 6

Activity

MK Maths Bk. 4 PG. 64, 65 and 73.

MAGIC SQUARE

Teaching learning activity

Each row, column and diagonal adds up to the same number called magic number.

Example

6	1	8
a	5	3
2	c	B

Magic total = 2 + 5 + 8

a + 8 – 8 = 15 – 8

a = 7

b + 3 + 8 = 15

b + 11 – 11 = 15 - 11

b = 4

c + 5 + 1 = 15

c + 6 – 6 = 15 - 6

c = 9

Activity

Primary school maths pg. 110

MK Maths Bk. 3 pg. 87

END