

COMPARING NUMBERS:

Greater than

Bigger number  Smaller number
72  65

Less than

Smaller number  Bigger number
33  86

Read the numbers from left to right. 72 is greater than 65.
33 is less than 86.


Exercise: Fill in >(more than), <(less than) or =(equal to) :

- | | |
|---|--|
| 1. 430 101 <input type="text"/> 431 001 | 2. 562 387 <input type="text"/> 563 179 |
| 3. 753 195 <input type="text"/> 735 195 | 4. 269 467 <input type="text"/> 269 467 |
| 5. 607 594 <input type="text"/> 670 594 | 6. 465 123 <input type="text"/> 465 213 |
| 7. 561 379 <input type="text"/> 563 179 | 8. 396 423 <input type="text"/> 369 741 |
| 9. 465 195 <input type="text"/> 465 195 | 10. 169 963 <input type="text"/> 139 963 |

ORDERING NUMBERS:

Ascending order – Means the numbers are arranged from the smallest number to largest number.

Example: 31; 35; 45; 61; 70; 81; 94; 98.

Ascending 

Exercise : Arrange these numbers in Ascending Order.

1. 534 135; 435 531; 435 351; 345 531; 543 135

.....
2. 782 584; 728 584; 782 485; 728 458; 782 845

.....
3. 241 365; 214 365; 234 615; 231 465; 214 563

.....
4. 645 123; 654 123; 614 235; 614 325; 645 321

.....
5. 147 582; 174 582; 147 528; 174 285; 147 825

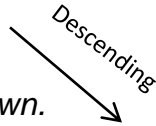
.....
6. 456 324; 465 324; 465 342; 456 432; 456 234

ORDERING NUMBERS:

Descending order – Means the numbers are arranged from the largest number to smallest number.

Example: 98; 94; 81; 70; 61; 45; 35; 31

The word starts with a 'D'. So think dives down.



Exercise : Arrange these numbers in Descending Order.

1. 235 132; 253 123; 253 321; 235 312; 253 213

.....
2. 325 213; 352 213; 352 312; 352 321; 325 321

.....
3. 846 159; 864 159; 864 951; 864 195; 846 951

.....
4. 782 584; 728 584; 728 485; 728 845; 782 854

.....
5. 987 453; 978 453; 987 543; 987 534; 978 543

.....
6. 537 648; 537 846; 573 684; 573 864; 537 486

EVEN NUMBERS: Can be divided exactly by 2. They end with

0; 2; 4; 6; 8.

All whole numbers are either even or odd.

- Add two even numbers together, your answer is always even. $2 + 4 = 6$

- Add two odd numbers together, your answer is always even.

$$3 + 7 = 10$$

Exercise – Write down the Even numbers between:

1. 931 to 945

.....
2. 857 to 869

ODD NUMBERS: Give Remainder when divided by 2.

They end in 1; 3; 5; 7; 9.

- Add an even number and an odd number together, your answer is always an odd number. $2 + 3 = 5$

Exercise – Write down the Odd numbers between:

1. 962 to 976

.....
2. 824 to 836

MULTIPLES: are the answers in the times tables.

Example: List the first four multiples of 5.

5; 10; 15; 20.

Exercise:

1. Write down the first six multiples of 10:

.....

2. Is 64 a multiple of 8?:

.....

3. What are the multiples of 9 less than 63?

.....

4. List the multiples of 7 between 28 and 70. The word between means that you do not include 28 and 70.

.....

5. List the multiples of 6 from 12 to 42. Using the words from and to means you will include the numbers 12 and 42.

.....

6. What are the multiples of 4 greater than 8 but less than 32?

.....

7. The numbers in the box are multiples of a number. What is the number?

7.1

28	49	14
70	63	

The number is

7.2

72	18	6
36	54	

The number is

7.3

28	4	16
20	80	

The number is

8. Circle the multiples of 15 in the table below:

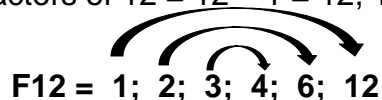
15	5	35	60
65	10	40	85
25	130	125	20
32	135	34	30
55	115	90	160
75	100	86	105
64	50	95	110
150	80	120	45

FACTORS: A Factor is a number, that divides exactly into another number, without a remainder.

Every number has at least two factors, because it can be divided by itself and 1.

- Find factors by division.
- Start dividing by 1, and then 2, then 3 etc.
- Always write the factors from smallest to biggest i.e. Ascending order.
- Pair up the factors. (factors are always in pairs).
- Remember the number itself is also a factor.

Example: Factors of 12 = $12 \div 1 = 12$, $12 \div 2 = 6$, $12 \div 3 = 4$,



Exercise: Write all the factors of each number in the diagram. Connect the factor pairs correctly.

1. 20

--	--	--	--	--	--

2. 45

--	--	--	--	--	--

3. 50

--	--	--	--	--	--

4. Each set of numbers are the **factors** of a number. What is the number?

All factors of the number are shown.	Number
1; 2; 7; 14	
1; 3; 9	
1; 3; 5; 15	
1; 2; 4; 5; 10; 20; 25; 50; 100	

5. Write down all the factors of each number given below.

F8 :

F16:

F64:

6. Look at the following numbers:



6.1 Write down all the numbers, which have 3 as a factor.

.....

6.2 Write down all the numbers, which have 6 as a factor.

.....

PROBLEM SOLVING : FACTORS AND MULTIPLES:

EXAMPLE:

Sam and Sally did their laundry today. Sam does laundry every 6 days and Sally does laundry every 9 days. How many days will it be until Sam and Sally both do laundry on the same day again?

Sam	Today	6	12	<u>18</u>
Sally		9	<u>18</u>	27

Sam and Sally do their laundry on the same day in **18 days**.

Exercise : Show all workings:

1. Tom and Jerry are both neighbours. They both cleaned their garden today. Tom cleans his garden every 4 days and Jerry clean his garden every 8 days. How many days will it be until Tom and Jerry both clean their garden on the same day again?

Draw table:

Answer:

2. Tshapang had two jobs to do at home. Every 3 days he must empty the bin and every 6 days he must mow the lawn. Last Monday he did both jobs. Use the table to help you solve the problem. On which day of the week will he do both jobs again?

Mon	Tues	Wed	Thur	Fri	Sat	Sun
Bin						
Mow						

Answer:

3. Shahista is making identical balloon arrangements for a party. She has 32 green balloons, 24 white balloons and 16 orange balloons. She wants each arrangements to have the same number of each colour.

a) What is the greatest number of groups that she can make if every balloon is used?

Show workings:

b) The number of balloons in ONE group is:

..... green balloons

..... white balloons

.....orange balloons

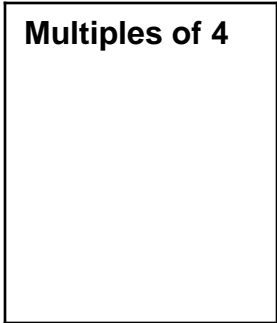
PROBLEM SOLVING : FACTORS AND MULTIPLES:

4. Bongi's age is a 2-digit multiple of 4.
Next year, her age will be a multiple of 5.
How old is Bongi now?

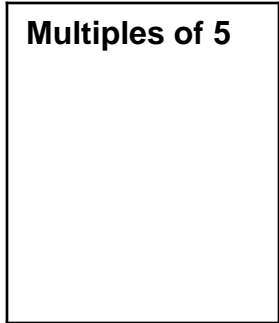
Clue: Decide on the number you need to start with, using the given information.

List multiples of 4 and 5. Eliminate possibilities.

Multiples of 4



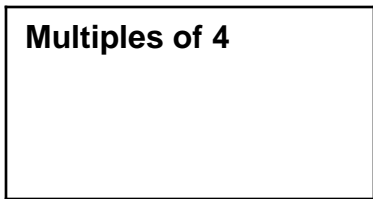
Multiples of 5



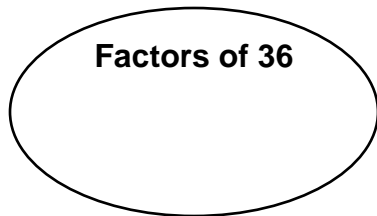
Bongi's age is:

5. A number is a multiple of 4. It is between 10 and 20. It is also a factor of 36. What is the number?

Multiples of 4



Factors of 36



The number is :

6. Use the clues and the hundreds chart to help you identify the secret number.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Read all the clues first. Unless stated otherwise, you may choose to follow a different order in completing the clues to get to the answer quickly. Try and solve the problem by using the fewest number of clues. Cross out irrelevant numbers and circle numbers which apply.

1. The number is greater than 8.
2. The number is less than 500.
3. The number is not a multiple of 5.
4. The number is a multiple of 6.
5. The number is even.
6. Its tens digit is even and is double its units digit.
7. The number is in the top half of the hundreds chart.

The number is:.....

Which clues did you use to solve the problem?

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