

MATHLETE

(अक्सर पूछा करते हैं.....)

Classes – 6th to 8th

Series

5



MATHEMATICAL LITERACY GROUP- CHANDIGARH

CR– THE SUPERSTAR

We must encourage positive behavior and discourage the negative actions to become responsible citizens. Do you agree class ?



Yes
Ma'am




Let's practice this in our classroom. Are you excited?

I have got an idea!
Let's prepare a reward chart! I will award each one of you with a golden star as reinforcement for your good behaviour.



Yes, we are!!!

But ,what if someone is being naughty in the class ?



OK,GOOD ONE!! Let's give him a green star. You will be awarded with +5 for every golden star and -3 for every green star.

We will access the points fortnightly and student with the maximum points would be the CR for next 15 days.

How will this work?



What is '-3'?

These are negative numbers, which are known as negative integers.

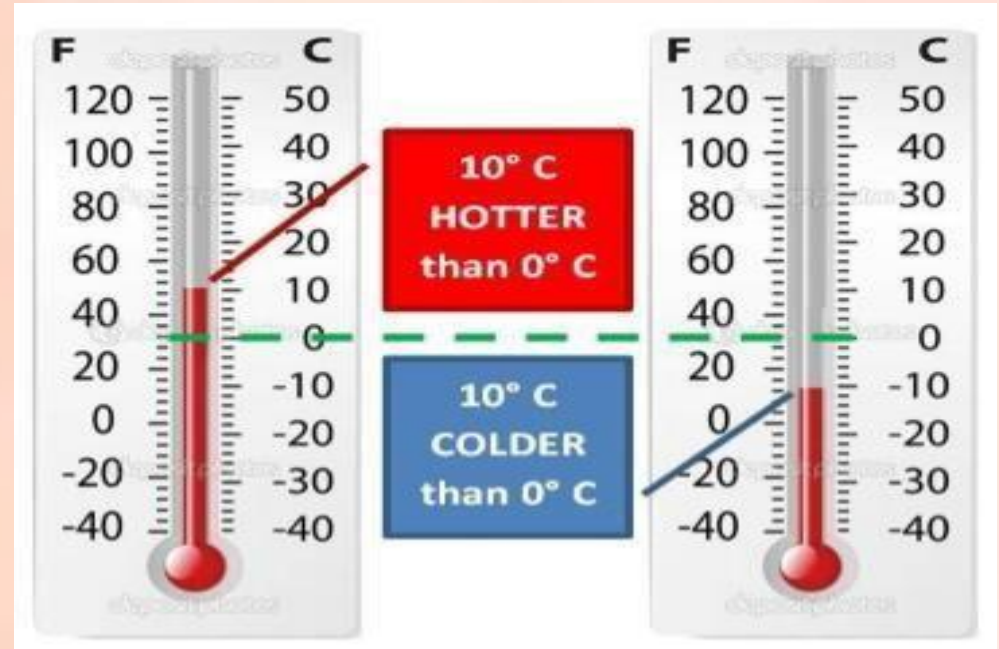
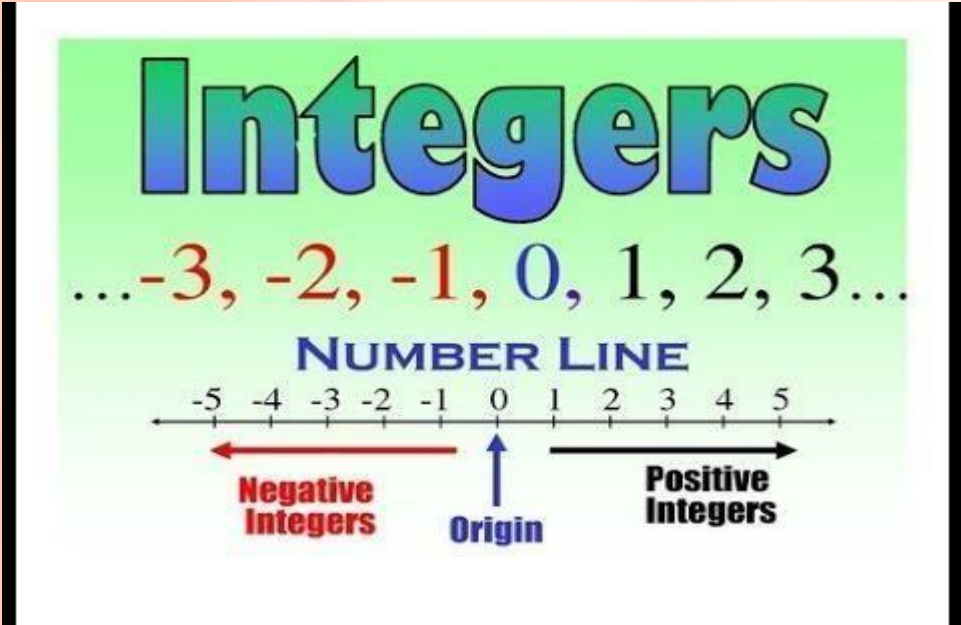


There are two types of integers
- Positive integers and negative integers.



I am zero. I am neither a
positive integer nor a
negative integer.







Do you know how to add and subtract two integers?

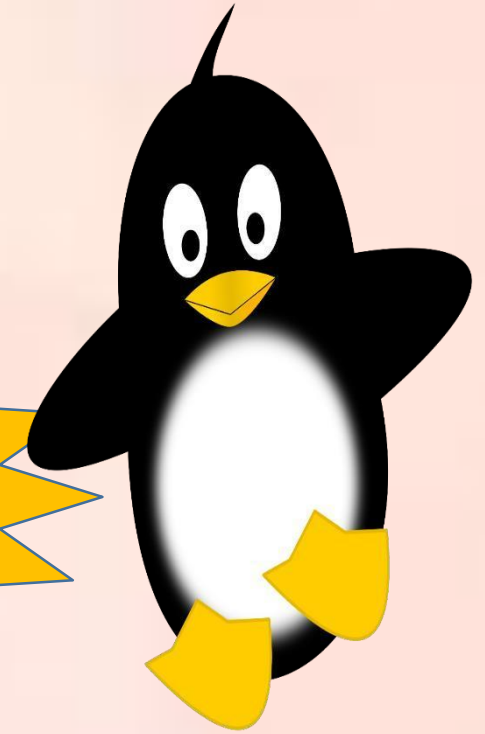


Adding Positive and Negative Integers				
Integer Sign		Operation	Answer Sign	Example
+	+	Add	+	$2 + 5 = 7$
-	-	Add	-	$- 2 - 5 = - 7$
+	-	Subtract	Larger Integer's Sign	$2 - 5 = - 3$
-	+	Subtract	Larger Integer's Sign	$- 2 + 5 = 3$

Now it's time to
multiply and divide
the given integers .

MULTIPLICATION AND DIVISION OF INTEGERS

Oh ! The rules
for multiplication
and division are
same

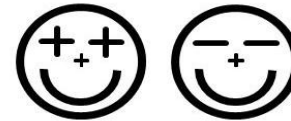


+	x	+	=	+
+	x	-	=	-
-	x	+	=	-
-	x	-	=	+

+	+	=	+
+	-	=	-
-	+	=	-
-	-	=	+

Multiplying and Dividing Integers

Same Signs -
POSITIVE

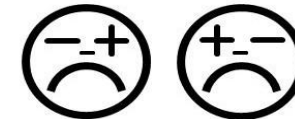


$$-9 \cdot -5 = 45$$

$$\frac{-72}{-8} = 9$$

Two negatives -
MAKE A POSITIVE

Different Signs -
NEGATIVE



$$-9 \cdot 5 = -45$$

$$\frac{72}{-8} = -9$$

One negative
STAYS NEGATIVE




























Now, all of you calculate your points?

TASK I:

REWARD CHART



NAME OF CHILD		
Abhinav	   	 
Ayesha	 	 
Anika	 	
Tarun	 	
Aditya		  
Agastya	 	
Arman		



How will I access the points?

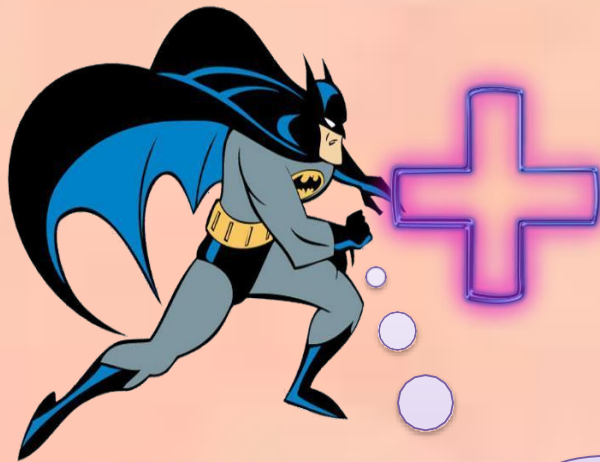
Q1. I want Tarun to work really hard and become the next CR.

A) How many more points he needs if maximum points required are 50.

B) If the above table represents the star collected in first 10 days of next fortnight then calculate how many golden stars should he earn during to become CR?

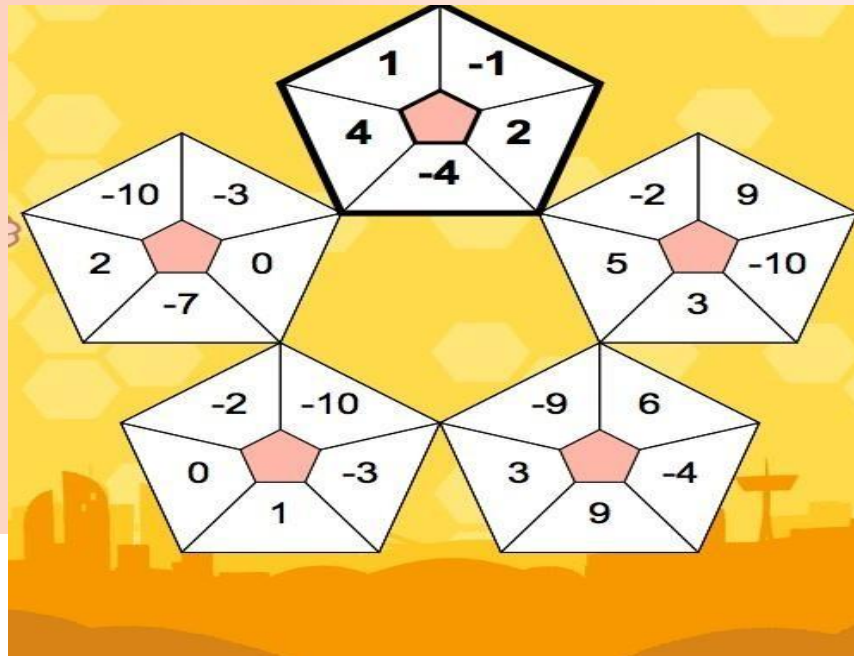
TASK II:

A diver descends 20 feet in the water from the boat at the surface of a lake. He then rose 12 feet and descends another 18 feet. At this point what is his depth in water?



Instruction
Add all the numbers given in the pentagon and write the result in the centre .

Fun time



TIME TRAVEL



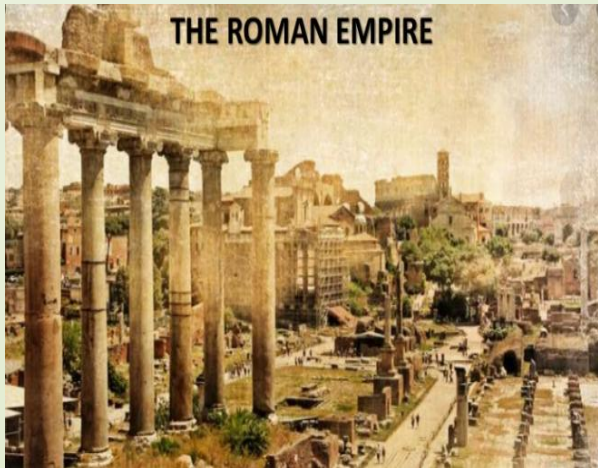
What is this?



Hi Manan!
This is a time travel machine.
Let's go to past & we will
explore some hidden facts.

Let's take a ride together. Oh, it has started.....

TASK 1:



Where have we
landed?



*WOW! I GUESS WE
ARE IN ROME IN 515
BC*



Could you please explain
in detail What is this BC?





Okay ! Listen
carefully

Sometimes you see Years written like

2000 AD

550 BC

What do they mean?



AD is AFTER
Jesus was born



BC is BEFORE
Jesus was born

AD comes from Latin word *Anno Domini* meaning "In the year of Our Lord"

BC comes from *Before Christ*

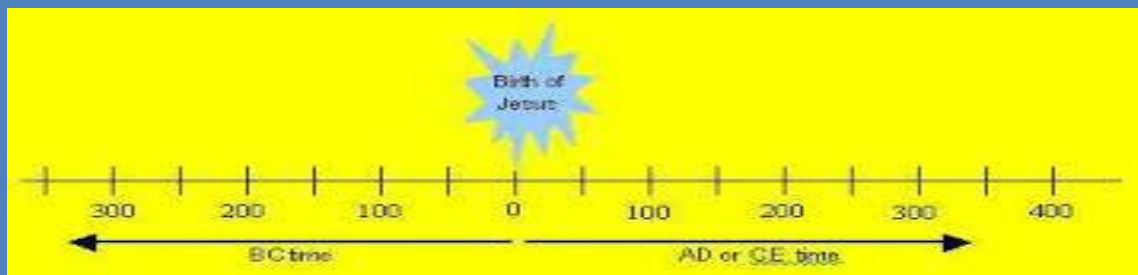
Years Before and After

So 550 BC means 550 years before Jesus was born

And 2000 AD **almost** means 2000 years after Jesus was born ...

... except AD started at 1, not 0

So, 2 AD is actually 1 Year after Jesus was born
And 2000 AD is actually 1999 Years after Jesus was born.



Calculating Dates across BC and AD

BC years are like negative numbers and AD are like positive numbers

You could find the time from, say, 5 BC to 7 AD by subtracting a negative number:

$$7 - (-5) = 7 + 5 = 12 \text{ years}$$

DO YOU KNOW 😊

The recent terms that mean the same as AD and BC:

CE means "Common Era" and is the same as **AD**

Example: 2018 CE is 2018 AD

BCE means "Before Common Era" and is the same as **BC**

Example: 500 BCE is 500 BC

Q. Roman civilization began in 509 BC and ended in 476 AD. How long did Roman civilization last?

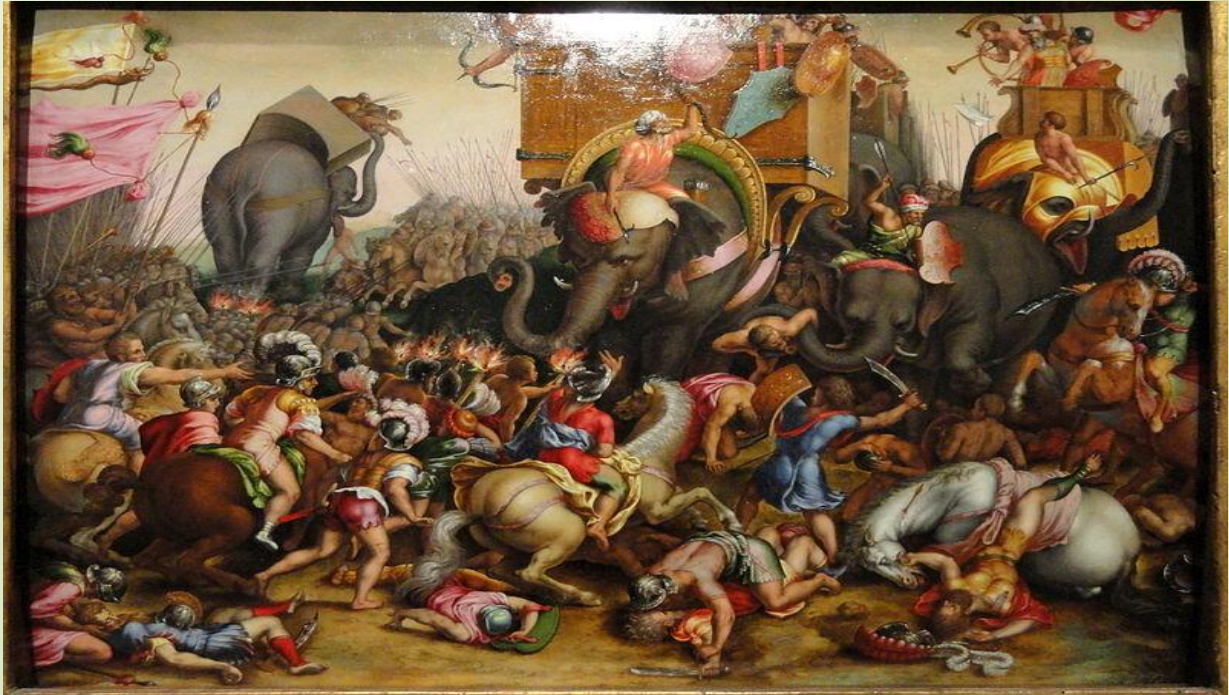
Oops! Integers were used during Roman civilization.



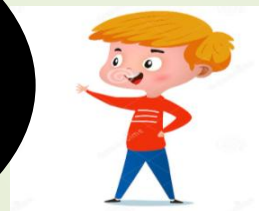


Lets go again.....

TASK II:



Oh no! Lots of bloodshed
all around. Some war is
going on....





Yes! These were the times of Punic wars. The Punic wars were armed conflicts between the Carthaginian Empire and the Roman Republic between 264 BC and 146 BC. These were the two dominant Mediterranean countries at those times.

Q. The Punic War began in 264 BC and ended in 146 BC. How long did the Punic Wars last?

CR—THE SUPERSTAR

TASK I:

Ans: A) 43

B) 9 golden stars

TASK II:

Ans: 26 feet deep (-26)

TIME TRAVEL

TASK I:

Ans: 985 yrs.

TASK II:

Ans: 118 yrs.