

# DON BOSCO SCHOOL, KOKAR, RANCHI

Session-2020 - 2021

## Class 6

### Subject- Mathematics 1

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Book Visualising Mathematics 6

Chapter: Integers

Ex 3.1

(Revision of class 5)

(Children can do this exercise in their copy) (Question Number 1 ,2,3,4,5,6,7,8)

(Already have done in class 5)

Absolute value of an integer is its numerical value irrespective of its sign.

**Q9. Write the absolute value of each of the following**

1. The absolute value of -9 is represented as  $|-9|$ , which is equal to 9
2. The absolute value of 23 is represented as  $|23|$ , which is equal to 23
3. The absolute value of 2 is represented as  $|2|$  which is equal to 2
4. The absolute value of -211 is represented as  $|-211|$ , which is equal to 211
5. The absolute value of -10 is represented as  $|-10|$  which is equal to 10
6. The absolute value of - 53 is represented as  $|-53|$ , which is equal to 53

**Note: The questions of the chapter have already been explained in the previous class. As such the other questions are to be made as an assignment.**

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### Exercise 3.3

**Q1. Subtract:**

1. 13 from 6

$$+6-(+13)$$

$$+6-13=-8$$

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{+X+=+}. ( Plus x plus= plus)

{-x=-}. (Minus x minus= minus)

{+X=-}. (Plus x minus = minus)

{-x += -} (minus x plus= minus)

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## Q2 Evaluate

$$\begin{aligned} 1. & (-389) - 216 \\ & = (-389) + (-216) \\ & = -389 - 216 \\ & = -605 \text{ Ans.} \end{aligned}$$

$$\begin{aligned} 2. & -126 - 492 \\ & = -(126) + (-492) \\ & = -126 - 492 \\ & = -618 \text{ Ans} \end{aligned}$$

$$\begin{aligned} \text{Q3} \\ & -576 - (-425) \\ & = (-576) + 425 \\ & = -151 \text{ Ans.} \end{aligned}$$

$$\begin{aligned} \text{Q4.} \\ & 380 - (-120) - (-65) \end{aligned}$$

$$\begin{aligned} & = 380 + 120 + 65 \\ & = 565 \text{ Ans.} \end{aligned}$$

**Q3. Number line already you have done in class 5.**

**Q4. What must be added to:**

a. -72 to get 45

$$\begin{aligned} & 45 - (-72) \\ & 45 + 72 \\ & 117 \text{ Ans.} \end{aligned}$$

b.

$$\begin{aligned} & -37 \text{ to get } -19 \\ & -19 + 37 \\ & = 18 \text{ Ans.} \end{aligned}$$

**Q5 Subtract the successor of -27 from the predecessor of -39.**

$$\begin{aligned} & \text{Successor of } -27 \text{ is } -26 \\ & \text{And predecessor of minus } 39 \text{ is } -40 \\ & \text{So, show } -40 - (-26) \\ & = -40 + 26 \\ & = -14 \text{ Ans.} \end{aligned}$$

**Q6. Kanika house is 165m to my left and Richa's house is 239 to my right. How far is Kanika house from Richa's house?**

Kanika's house \_\_\_\_\_my position \_\_\_\_\_Ric house.  
165(my left)\_\_\_\_\_to words right239.

Kanika house on my left =165m  
Richa's house is 239 m on my right=239

The total distance between them  
 $165m+239m=404m$

**Q7.Ans.**

The distance above sea level is =18 m  
The distance below sea level =13 m  
The difference in heights between them  
 $28-(-13)$   
31m Ans.

**Q8. From the sum of - 5376 and 3744 ,  
subtract the sum of - 2 150 and 1125**

**Sum of - 5376 and 3744**

$=3744 +(-5376)$   
 $=3744-5376$   
 $=-1632$

And sum of - 2150 and 1125  
 $=1125 + (-2150)$   
 $=1125 - 2150$   
 $=-1025$

Now subtracting - 1025 from - 1632  
We get  $(-1632)-(-1025)$   
 $=-1632+1025$   
 $=-607$ Ans.

**Q9.**

**Find the value of the following.**

$-12+(-7)+36+(-32)+(-49)$   
 $-12-7+36-32-49$   
 $36-12-7-32-49$   
 $36-100$   
 $-64$  Ans.

b.

(Do it yourself)

**Q10.**

The sum of two integers is -23 if one of the integers is 145 find the other.

We have to find a number which when added to 145 gives -23

As such required number =  $-23 - 145$

$$= -23 + (-145)$$

$$= -23 - 145$$

$$= -168 \text{ Ans.}$$

**Q11. The sum of two integers is 79. if one of the integer is -43, find the other.**

Here we have to find a number which when added to -43 gives 79.

As such required number =  $79 - (-43)$

$$= 79 + 43 = 122 \text{ And}$$

**Q12.**

In a quiz competition team A scored -25, 10, 15, -10 and team B scored 15, 0, -30, 20 in four successive rounds. Which team scored more?

$$\text{Team A} = (-25) + 10 + 15 + (-10) = (-10)$$

$$\text{Team B} = 15 + 0 + (-30) + 20 = 5 \text{ more}$$

So team B scored more.

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Facts to remember

- **0 is an integer which is neither positive nor negative**
  - **On the number line of integers all numbers to the right of zero are positive integers and all numbers to the left of zero are negative integers.**
  - **Two integers are at the same distance from 0 but on opposite sides of it are called opposite numbers.**
  - **To add two positive integers find the sum of their absolute values and place a positive sign before it.**
  - **To add two negative integers find the sum of their absolute values and place a negative sign before it.**
  - **To add a positive integer with a negative integer find the difference of their absolute values and place the sign of the addend with the greater absolute value before it.**
  - **The integer 0 is called The additive identity.**
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