

## Assignment for 10 days.

## INTEGERS

6<sup>th</sup> Std.

Math

Term Ist

Ex 4.1

Qn

Qno1) Arrange the following numbers in ascending order

a 562; 968; 526; 689; 652; 625; 986

ans  $\Rightarrow$  526; 562; 625; 652; 689; 968; 986

b. Do your self

Qno2) Arrange the following numbers in descending order

a 719; 1719; 1179; 1791; 1971; 971; 917

ans  $\Rightarrow$  1971; 1791; 1719; 1179; 971; 917; 719

b Do your self

Qno3) write the following numbers

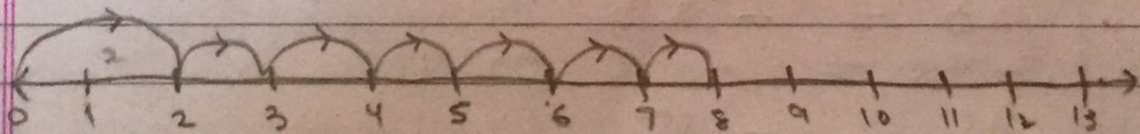
a 10 more than 869 = 879

b 10 less than 1009 = 999

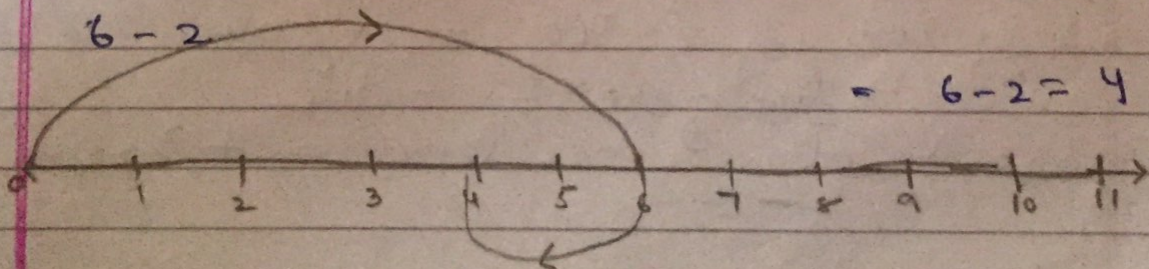
c 100 more than 1086 = 1186

d do your self

Q4) Draw a number line

a  $2 + 6$ 

$$2 + 6 = 8$$

b  $6 - 2$ 

$$= 6 - 2 = 4$$

Q5. Put  $<$ ,  $>$  or  $=$  sign in the boxes

- a  $7862 > 7682$
- b  $0 < 962$
- c  $638 - 10 < 683 - 10$   
 $628 < 673$
- d  $462 \times 10 > 426 \times 10$   
 $4620 > 4260$
- e  $328 - 5 > 328 - 10$   
 $323 > 318$
- f  $92 \times 0 = 29 \times 0$   
 $0 = 0$

Ex 4.2

Qno 1. Write the opposite of each of the following:-

- a gaining a weight by 4 Kg  
Ans losing a weight by 4 Kg
- b. 5 km above sea level  
ans 5 km below sea level.
- c. A gain of ₹ 10  
Ans A loss of ₹ 10
- d, e, f Do your self
- f.  $23 = -23$
- g.  $-48 = +48$  or  $48$
- h.  $15 = -15$

Qno 2 Write integers to represent the following situations.

- a A gain of ₹ 500 = +500
- b  $4^{\circ}\text{C}$  below zero =  $-4^{\circ}\text{C}$
- c 300 m above sea level = +300 m



d, e & f do your self

Q no 9. Write the following numbers in ascending order:

a. -8, 0, 4, -15, -46, -97, 32  
ans  $-97 < -46 < -15 < -8 < 0 < 4 < 32$

b do your self

Q 10 Write the following numbers in descending order

a do your self

b  $-14, -96, -52, -69, -42, -11, 0$

Ans  $0 > -11 > -14 > -42 > -52 > -69 > -96$

Q no 11 Write 5 integers greater than -5

ans  $-4, -3, -2, -1, 0$

Q no 12 Write 5 integers less than -27

$-28, -29, -30, -31, -32$

Q 12 Find the value of

a.  $|7| = 7$  ∴ The absolute value of an integer is always positive, regardless of its sign

b.  $|-46| = 46$       c.  $|0| = 0$       d.  $|231| = 231$

e.  $7 + |-3| = 7 + 3 = 10$       f.  $-1 - 2 = -2$

Q 13 Write True or false - Do your self

NOTE ∴ Positive integers are greater than any negative integers. In case of integers 0 is in the middle of a number line. On the right side of zero we label positive integers and on the left side of zero we label negative integers. The numbers occurring to the right is greater than on the left

is 16. Difference between 16 and 9 is 7. Since  
 → 16 is greater than 9 therefore our answer will  
 also be positive.

b  $(-5) + (-6) = -5 - 6 = -11$

The absolute value of -5 and -6 is 5 and 6 respectively  
 ∴  $5 + 6 = 11$ . Because both the numbers are negative  
 ∴ The sum is also negative

d  $(-12) + 26 = -12 + 26 = 14$

Difference between 26 and 12 = 14 But  $26 > 12$   
 ∴ The answer will be in positive

e .do your self

f  $2 + (-14) = 2 - 14 = -12$

Difference between 14 and 2 = 12 but 14 is  
 more greater than 2 so our answer will be in  
 negative

Ques 3 Find the sum of

a  $-365$  and  $-87$

=  $-365 + (-87)$

=  $-365 - 87$

=  $-452$

b  $-4632$  and  $2468$

=  $-4632 + 2468$

=  $-2164$

c  $-589$  and  $-611$

=  $-589 + (-611)$

=  $-589 - 611$

=  $-1200$

d  $-103$  and  $313$

=  $-103 + 313$

=  $210$

e  $3002$  and  $-999$

$3002 + (-999)$

$3002 - 999$

$2003$

f, g and h  
 do yourself

Qno 4 Use the associative law to add these integers

a  $200 + (-33) + (-67)$   $(a+b)+c = a+(b+c)$   
 $= [200 + (-33)] + (-67) = 200 + [(-33) + (-67)]$   
 $= 167 - 67 = 200 + [-100]$   
 $= 100 = 200 - 100$   
 $= 100 = 100$

b  $0 + (1) + (-1) = (a+b)+c = a+(b+c)$   
 $[0 + 1] + (-1) = 0 + [1 + (-1)]$   
 $1 - 1 = 0 + [1 - 1]$   
 $0 = 0 + 0$   
 $= 0 = 0$

c and d do you self

Qno 5 Find the additive inverse of

a  $-86 = 86$  [ $\because$  The sum of an integer and its  
 $-86 + 86 = 0$  opposite should be zero]

b  $247 = -247$  [ $\because$  The sum of an integer  
 $247 + (-247) = 0$  and its opposite should  
be zero]

Qno 6 Write the successor of each of the following

a  $-468 + 1 = -467$  c.  $-5 + 1 = -4$   
b  $325 + 1 = 326$  d.  $0 + 1 = 1$   
e and f not done

Qno 7 Write the predecessor of each of the following

a  $-444 - 1 = -445$  b.  $625 - 1 = 624$   
c  $0 - 1 = -1$  d  $-501 - 1 = -502$

Ques Simplify

$$\begin{aligned} a \quad & (-7) + (-9) + 12 + (-16) \\ & = -7 - 9 + 12 - 16 \\ & = 12 + (-7 - 9 - 16) \\ & = 12 + (-32) \\ & = 12 - 32 \\ & = -20 \end{aligned}$$

$$\begin{aligned} b, \quad & 230 + (-89) + 170 + (-11) + 0 \\ & = 230 - 89 + 170 - 11 + 0 \\ & = (230 + 170 + 0) + (-89 - 11) \\ & = 400 + (-100) \\ & = 400 - 100 \\ & = 300 \end{aligned}$$

c and d do your self.

Ques 9 What is the sum of the largest 4 digit positive integers and the smallest 3 digit negative integers

Sol. Largest 4 digit positive integers = 9999  
Smallest 3 digit negative integers = -100

$$\begin{aligned} \therefore \text{Sum} &= 9999 + (-100) \\ &= 9999 - 100 \\ &= 9899 \end{aligned}$$

Ques 10 Add the successor of -99 and the predecessor of -40

Sol. Successor of -99 = -98  
predecessor of -40 = -41

$$\therefore \text{Sum} = -98 + (-41) = -98 - 41 = -139$$

Ex 4.4

Qno 1 Subtract

a 46 from -230  
 $= -230 - (46)$   
 $= -230 - 46$   
 $= -276$

b -30 from 66  
 $= 66 - (-30)$   
 $= 66 + 30$   
 $= 96$

c -86 from -25  
 $= -25 - (-86)$   
 $= -25 + 86$   
 $= 61$

d 83 from 186  
 $= 186 - 83$   
 $= 103$

e, f, g and h do your self.

Q.2 a  $-18 + (-12) - (-1)$   
 $= -18 - 12 + 1$   
 $= (-18 - 12) + 1$   
 $= -30 + 1$   
 $= -29$

e  $64 + [(-20) - (-30)] - (-6)$   
 $= 64 + [-20 + 30] + 6$   
 $= 64 + 10 + 6$   
 $= 80$

h  $150 - (-90) - 650$   
 $150 + 90 - 650$   
 $= 240 - 650$   
 $= -410$

b, c, d, f, g do your self

Qno 2 Fill in the blanks

a  $(-4) + 4$      $8 + (-8)$   
 $-4 + 4$      $8 - 8$   
 $0$      $=$      $0$

b  $35 - (-68)$      $35 - 68$   
 $= 35 + 68$      $- 33$   
 $= 103$      $>$      $-33$

c  $-65 + 96$      $-32 - 58$   
 $31$      $>$      $-90$

d  $(-98) - (-2)$      $-98 + 2$   
 $= -98 + 2$      $-96$   
 $= -96$      $=$      $-96$

e and f do your self