



### Negative Numbers and Integers Ex 5.1 Q12

**Answer :**

- (i) Absolute value of 14 is 14.
- (ii) Absolute value of  $-25$  is 25.
- (iii) Absolute value of 0 is 0.
- (iv) Absolute value of  $-125$  is 125.
- (v) Absolute value of  $-248$  is 248.
- (vi) Absolute value of  $(a - 7)$  is  $(a - 7)$  if  $a$  is greater than 7, that is,  $a - 7 > 0$ .
- (vii) if  $a - 2$  is less than 7, that is,  $a - 2 < 7 \Rightarrow a < 9$  or  $a - 7 < 2$   
So absolute value of  $a - 7 = a - 7$  if  $7 < a < 9$  that is  $a - 2$  is less than 7 but  $a - 2$  is greater than 5.  
and absolute value will be  $-(a - 7)$  if  $a < 7$  if  $a - 7$  is less than 5.
- (viii) Absolute value of  $(a + 4)$  is  $(a + 4)$  if  $a$  is greater than  $-4$ , that is,  $a > -4 \Rightarrow a + 4 > 0$ .
- (ix) Absolute value of  $(a + 4)$  is  $-(a + 4)$  if  $a$  is less than  $-4$ , that is,  $a < -4 \Rightarrow a + 4 < 0$ .
- (x) Absolute value of  $-3$  is 3.
- (xi)  $-|-5|$  is  $-5$  and its absolute value is 5.
- (xii)  $|12 - 5| = |7|$  and its absolute value is 7.

### Negative Numbers and Integers Ex 5.1 Q13

**Answer :**

- (i)  $-9, -8, -7$  and  $-6$  are the four negative integers less than  $-10$ .
- (ii)  $-11, -10, -9, -8, -7$  and  $-6$  are the six negative integers just greater than  $-12$ .

### Negative Numbers and Integers Ex 5.1 Q14

**Answer :**

- (i) False  
Integers are negative also.
- (ii) True  
0 is neither positive nor negative.
- (iii) False  
0 is simply an integer that is neither positive nor negative.
- (iv) True  
Every negative integer is to the left of 0 on a number line.
- (v) False  
The absolute value of positive integer is integer itself. So both are equal.
- (vi) True  
Its opposite will be a negative integer and positive integer is always greater than negative integer.
- (vii) True  
Natural numbers start from 0, and 0 is greater than every negative integer.
- (viii) False  
0 is neither positive nor negative.

\*\*\*\*\* END \*\*\*\*\*