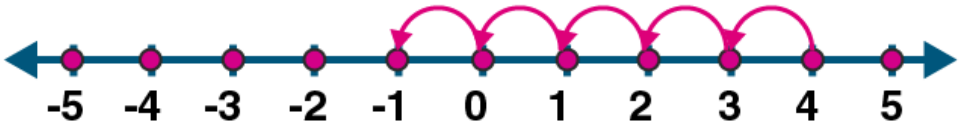
1. Write the opposite of the following:
(i) Loss of Rs 5000
(ii) 30 km East of Delhi
(iii) 200 m above sea level
(iv) 325 BC
(v) Spending Rs 2700
(vi) 25^0 C above freezing point.
Solution:
The opposite statements are as follows:
(i) Profit of Rs 5000
(ii) 30 km West of Delhi
(iii) 200 m below sea level
(iv) 325 AD
(v) Earning Rs 2700
(vi) 25^0 C below freezing point

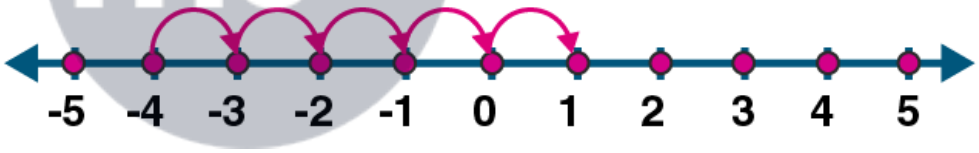
2. Write each of the following using appropriate sign '+' or '-'
(i) Gain of 3 kg Weight
(ii) Earning Rs 1340
(iii) 20^0 C below freezing point
(iv) Loss of Rs 470
(v) Depositing Rs 2500 in a bank
(vi) 240 m below sea level
(vii) A jet plane flying at a height of 9320 m
(viii) 6 m down in the basement of a building
Solution:
The statements using appropriate sign '+' or '-' are as follows:
(i) + 3 kg Weight
(ii) + Rs 1340
(iii) – 20^0 C
(iv) – Rs 470
(v) + Rs 2500
(vi) – 240 m
(vii) + 9320 m
(viii) – 6

3. Evaluate the following, using the numbers line
(i) 4 + (-5)
(ii) (-4) + 5

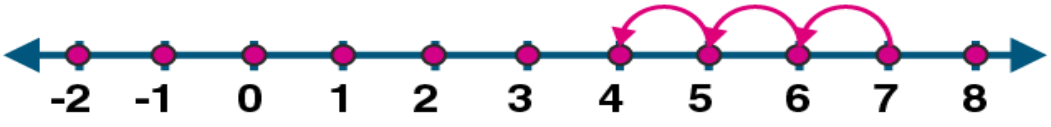
(iii) 7 + (-3)
(iv) -6 + (-2)
Solution:
(i) Given
4 + (-5)
Start from point 4 on the number line and move 5 units to the left side
We reach at – 1
Therefore,
4 + (-5) = 4 – 5
= - 1



(ii) Given
(-4) + 5
Start from -4 on the number line and move 5 units to the right side,
We reach at 1
Therefore,
(-4) + 5 = - 4 + 5
= 1



(iii) Given
7 + (-3)
Start from 7 on the number line and move 3 units to the left side,
We reach at 4
Therefore,
7 + (-3) = 7 – 3
= 4



(iv) Given
(-6) + (-2)
Start from -6 on the number line and move 2 units to the left side,

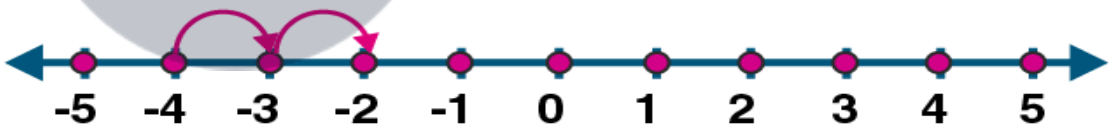
We reach at -8
Therefore,
(-6) + (-2) = -6 – 2
= -8

4. Evaluate the following:
(i) (-8) + (-14)
(ii) -35 + (-47)
(iii) 91 + (-48)
(iv) (-203) + 501
(v) (-36) + 29
(vi) (-131) + 97
Solution:
(i) (-8) + (-14)
= - 8 – 14
We get,
= - 22
(ii) -35 + (-47)
= -35 – 47
We get,
= -82
(iii) 91 + (-48)
= 91 – 48
We get,
= 43
(iv) (-203) + 501
= - 203 + 501
We get,
= 298
(v) (-36) + 29
= -36 + 29
We get,
= -7
(vi) (-131) + 97
= -131 + 97
We get,

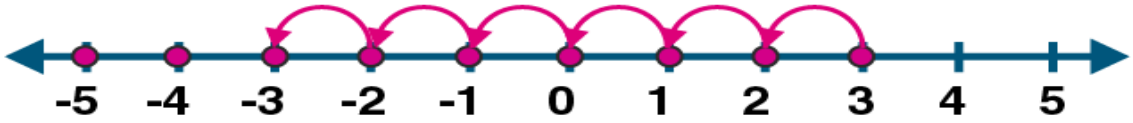
= -34

5. Evaluate the following, using the number line:
(i) 4 – (-2)
(ii) -4 – (-2)
(iii) 3 – 6
(iv) -3 – (-5)
Solution:
(i) 4 – (-2)
Start from 4 on the number line and move 2 units to the right side,
We reach at 6
Therefore,
4 – (-2) = 4 + 2
= 6

(ii) -4 – (-2)
Start from -4 on the number line and move 2 units to the right side,
We reach at -2
Therefore,
-4 – (-2) = - 4 + 2
= -2

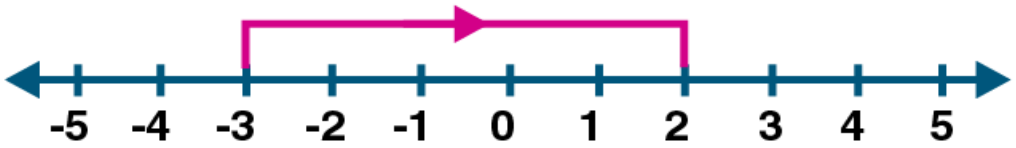


(iii) 3 – 6
Start from 3 on the number line and move 6 units to the left side,
We reach at -3
Therefore,
3 – 6 = -3



(iv) -3- (-5)
Start from -3 on the number line and move 5 units to the right side,
We reach at 2
Therefore,
-3- (-5) = -3 + 5

= 2



6. Find the value of:
(i) 6 – 9 + 4
(ii) -5 – (-3) + 2
(iii) 7 + (-5) + (-6)
(iv) 6 – 3 – (-5)
Solution:
(i) 6 – 9 + 4
= (6 + 4) – 9
= 10 – 9
We get,
= 1
(ii) -5 – (-3) + 2
= -5 + 3 + 2
= -5 + 5
We get,
= 0
(iii) 7 + (-5) + (-6)
= 7 – 5 – 6
= 2 – 6
We get,
= -4
(iv) 6 – 3 – (-5)
= 6 – 3 + 5
= 3 + 5
We get,
= 8