

Negative Numbers and Integers Ex 5.3 Q5

Let x be an integer such that |x| < 5.

 $\therefore -5 < \chi < 5$

=> x =] -4, 4[

These are the nine integers whose absolute values are less than 5, namely, -4, -3, -2, -1, 0, 1, 2, 3 and 4

Negative Numbers and Integers Ex 5.3 Q6

Answer:

(i)
$$|4| + |2| = 6 = |4| + |2|$$
; True

(ii)
$$|2-4| = |-2| = 2 \neq 2 + 4 = 6$$
; False

(iii)
$$|4 - 2| = 2 = |4| - |2|$$
; True

(iv)
$$|(-2) + (-4)| = |-6| = 6 = |-2| + |(-4)|$$
; True

Negative Numbers and Integers Ex 5.3 Q7

Answer:

(ii)
$$(-4) + (-2) = -6 = (-2) + (-4)$$
; Yes

(iii)
$$0 + (-6) = -6$$
; Yes

+	-6	-4	-2	0	2	4	6
6	0	2	4	6	8	10	12
4	-2	0	2	4	6	8	10
2	-4	-2	0	2	4	6	8
0	-6	-4	-2	0	2	4	6
-2	-8	-6	-4	-2	0	2	4
-4	-10	-8	-6	-4	-2	0	2
-6	-12	-10	-8	-6	-4	-2	0

Negative Numbers and Integers Ex 5.3 Q8

Answer:

(i)
$$x + 1 = 0 \Rightarrow x = -1$$

(ii)
$$x + 5 = 0 \Rightarrow x = -5$$

(iii)
$$-3 + x = 0 \Rightarrow x = 3$$

(iv)
$$x + (-8) = 0 \Rightarrow x = 8$$

$$(v) 7 + x = 0 \Rightarrow x = -7$$

$$(vi) x + 0 = 0 \Rightarrow x = 0$$

******* END *******