

PROF. DOSS

Integers can be used to represent *opposite* things.

By that, we can also understand integers better and *work with* integers mentally and faster .

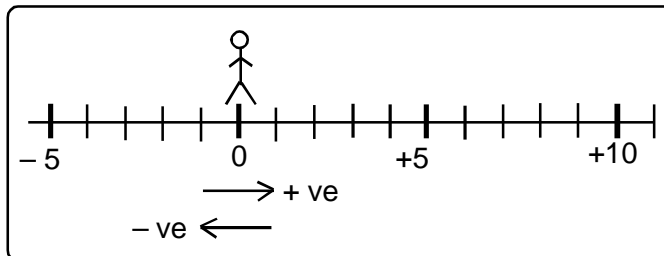
EXAMPLES

i) 'Forward 10 steps' can be +10;
 'Backward 4 steps' can be -4

ii) 'Up 3 floors' can be +3;
 'Down 5 floors' can be -5

iii) 'Profit Rs.80' can be +80;
 'Loss Rs.30' can be -30

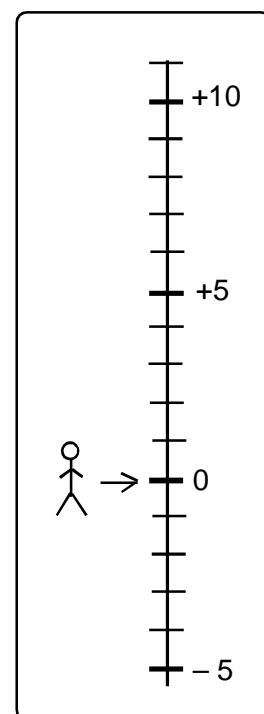
iv) 'Down 3 floors' can be -3;
 'Down 5 floors' can be -5



ADDITION OF INTEGERS

- i) $(+10) + (-4) =$ '6 steps in front' = + 6
- ii) $(+3) + (-5) =$ '2 floors below' = - 2
- iii) $(+80) + (-30) =$ 'profit Rs.50' = +50
- iv) $(-3) + (-5) =$ '8 floors below' = - 8

Same signs >>> (Sign of **Larger**) **Sum**
 Diff signs >>> (Sign of **Larger**) **Diff**



With few more examples help children to see the pattern as below.

EXAMPLES

- 01) $+5 + +3 = +$ (sum: 5+3) = + 8
- 02) $+5 + -3 = +$ (diff: 5-3) = + 2
- 03) $+5 + -9 = -$ (diff: 9-5) = - 4
- 04) $-5 + +3 = -$ (diff: 5-3) = - 2
- 05) $-5 + -3 = -$ (sum: 5+3) = - 8

Problems on the Left:
 Example 4: **Add:**
 (i) + 57 and + 112 (ii) - 32 and - 83

(i) $(+ 57) + (+ 112) = + 169$
 (ii) $(- 32) + (- 83) = - 115$

Example 5: **Add:**
 (i) + 53 and - 29 (ii) - 53 and + 29

(i) $(+53) + (- 29) = + 24$
 (ii) $(- 53) + (+ 29) = - 24$