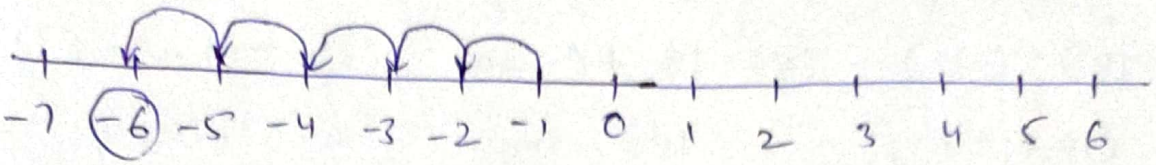
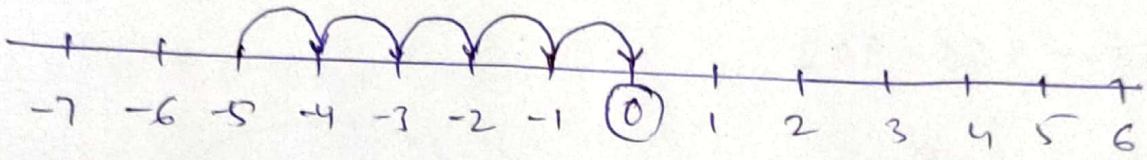
Exercise 4.2

1. Using number line write the integer which is.

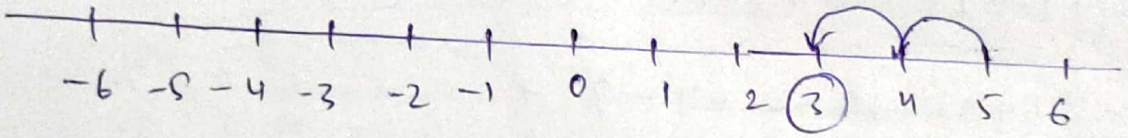
(a) 5 less than -1



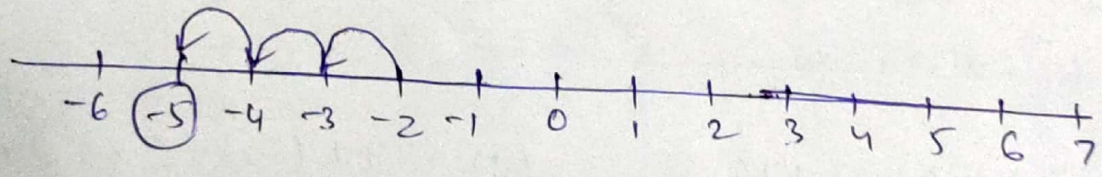
(b) 5 more than -5



(c) 2 less than 5

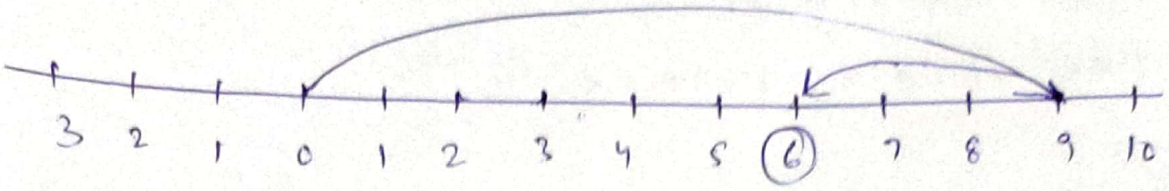


(d) 3 less than -2

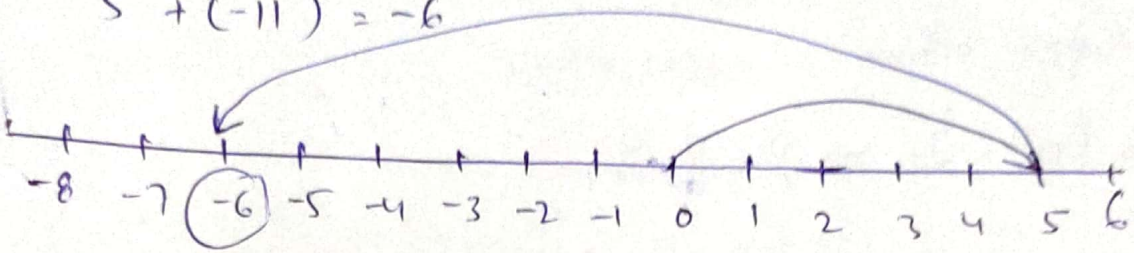


2. Using number line, add the following integers

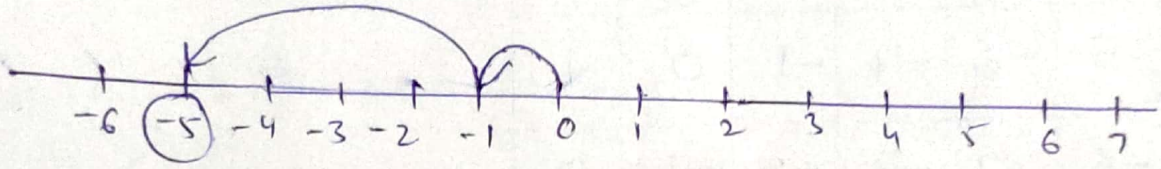
(a) $9 + (-3) = 6$



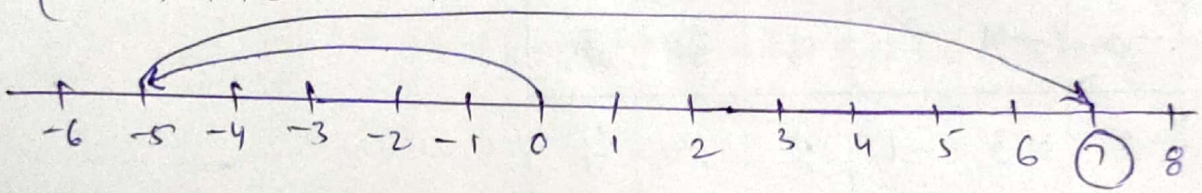
(b) $5 + (-11) = -6$



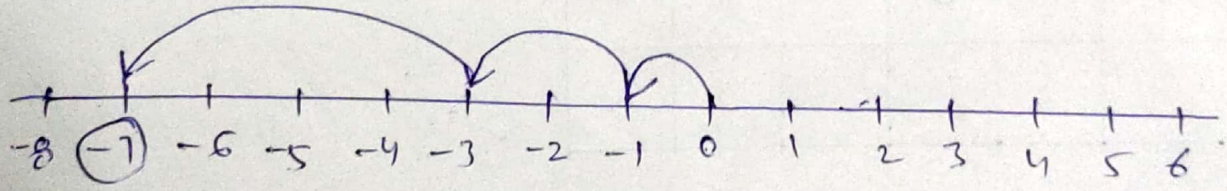
(c) $(-1) + (-4) = -5$



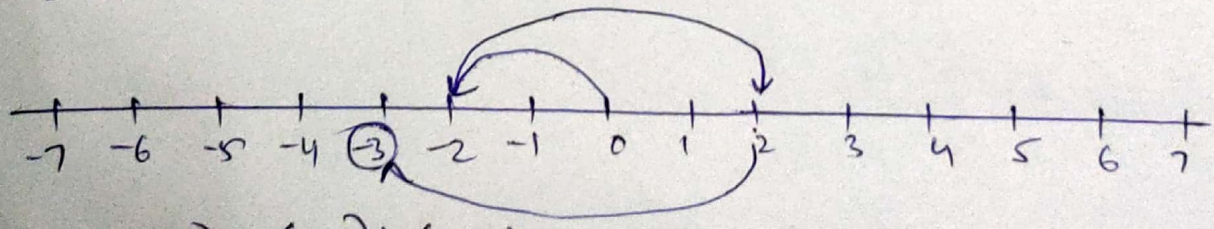
(d) $(-5) + 12 = 7$



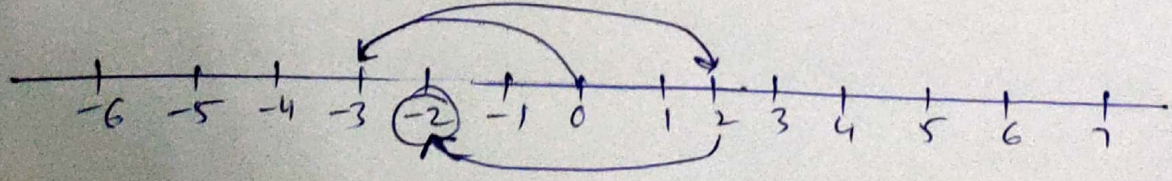
(e) $(-1) + (-2) + (-4) = -7$



(f) $(-2) + 4 + (-5) = -3$



(g) $(-3) + (5) + (-4) = -2$



3. Add without using number line.

(a) $18+13$
$= 31$

(b) $18+(-13)$
$= 18-13$
$= 5$

(c) $(-18)+13$
$= -18+13$
$= -5$

(d) $(-18)+(-13)$
$= -(18+13)$
$= -31$

(e) $180+(-200)$
$= 180-200$
$= -20$

(f) $777+(-67)$
$= 777-67$
$= 710$

(g) $1262+(-366)+(-962)$
$= 1262-366-962$
$= 1262-1328$
$= -66$

(h) $30+(-27)+21+(-19)+(-3)+(11)+(-9)$
$= 30-27+21-19-3+11-9$
$= 30+21+11-27-19-3-9$
$= 62-58$
$= 4$

(i) $(-7)+(-9)+4+16$
$= -7-9+4+16$
$= -16+4+16$
$= -16+20$
$= 4$

(j) $37+(-2)+(-65)+(-8)$
$= 37-2-65-8$
$= 37-75$
$= -38$

4 Write the successor and predecessor of the following

a. -15

Successor of -15 = -15+1 = -14

Predecessor of -15 = -15-1 = -16

b. 27

Successor of 27 = 27+1 = 28

Predecessor of 27 = 27-1 = 26

c. -79

Successor of -79 = -79+1 = -78

predecessor of -79 = -79-1 = -80

d. 0

Successor of 0 = 0+1 = 1

Predecessor of 0 = 0-1 = -1

e. 29

successor of 29 = 29+1 = 30

predecessor of 29 = 29-1 = 28

f. -18

successor of -18 = -18+1 = -17

Predecessor of -18 = -18-1 = -19

g. -21

Successor of -21 = -21+1 = -20

Predecessor of -21 = -21-1 = -22

h. 99

Successor of 99 = 99+1 = 100

Predecessor of 99 = 99-1 = 98

i. -1

Successor of -1 = $-1+1=0$

Predecessor of -1 = $-1-1=-2$

j. -13

Successor of -13 = $-13+1=-12$

Predecessor of -13 = $-13-1=-14$

5. Complete the following addition table.

+	-3	-4	-2	+1	+2	+3
-2	-5	-6	-4	-1	0	1
-3	-6	-7	-5	-2	-1	0
0	-3	-4	-2	1	2	3
+1	-2	-3	-1	2	3	4
+2	-1	-2	0	3	4	5