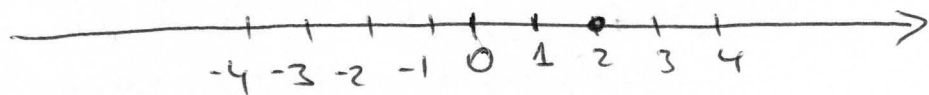


INTEGERS

NATURAL $\{1, 2, 3, 4, \dots\}$

WHOLE $\{0, 1, 2, 3, 4, \dots\}$

INTEGERS $\{\dots, -4, -3, -2, -1, 0, 1, 2, 3, 4, \dots\}$



$-4 < -1$
LESS THAN

$-1 > -4$
GREATER THAN

EQUIVALENT

$1 \leq 4$ TRUE \longleftrightarrow $4 \geq 1$ TRUE

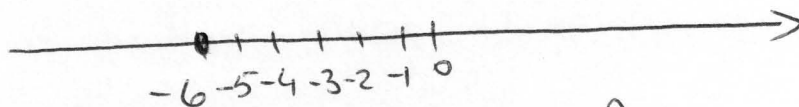
$5 \leq 5$ TRUE

$5 < 5$ FALSE

$< , > , \leq , \geq$

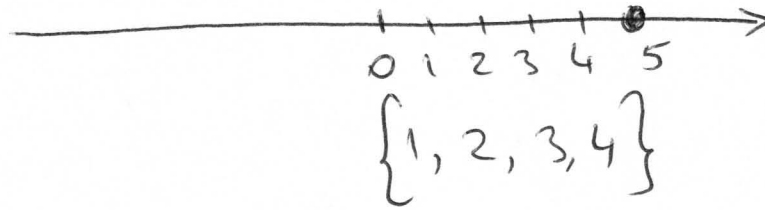
Ex 1

-6



$\{-6, -5, -4, -3, -2, -1\}$

P1

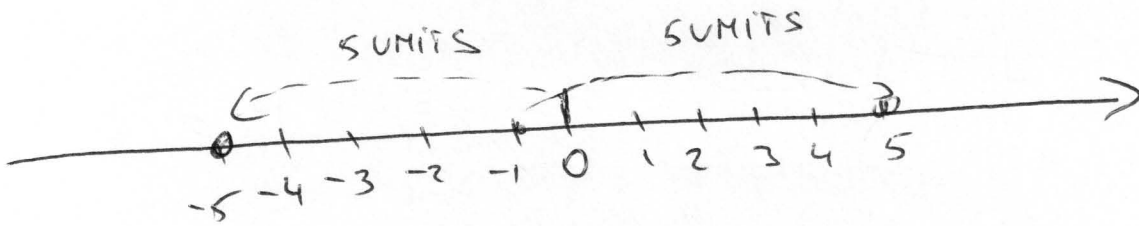


Ex2 $A = \{\underline{-6}, \underline{-2}, 0\} \leq -2$

SET: $\{-6, -2\}$; ELEMENTS: $-6, -2$

P2 $B = \{-5, -1, 5\} > -1$

↓
 THE NUMBER 5
 THE SET $\{5\}$



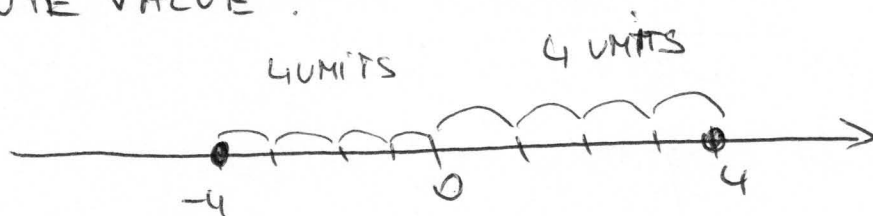
THE OPPOSITE OF 5 : -5

THE OPPOSITE OF -5 : $5 \rightarrow -(-5) = 5$

Ex3

$6 \longrightarrow -6$
 $-51 \longrightarrow 51 \quad (-(-51) = 51)$
 $0 \longrightarrow 0$

ABSOLUTE VALUE :



$$|4| = 4$$

$$|-4| = 4$$

$$|10| = 10, \quad |-100| = 100$$

$$|0| = 0$$

NOTE : ABS VALUE IS POSITIVE (OR ZERO).

Ex 4

$$-|-10| = -10$$

P4

$$-|-9| = -9$$

Ex 5

$$-|-5| = -5$$