rectangle area.

Q. Given universal set $= \{x : x \in N, 10 \leq x \leq 35\}$

$A = \{x \in N : x \leq 16\}$ and $B = \{x : x > 29\}$ Find:

Ans Universal set $= \{x : x \in N, 10 \leq x \leq 35\}$

$= \{10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35\}$

$A = \{x \in N, x \leq 16\}$

$= \{10, 11, 12, 13, 14, 15, 16\}$

$B = \{x : x > 29\}$

$= \{30, 31, 32, 33, 34, 35\}$

(i) $A' = \{17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35\}$

$= \{x : x \in N ; 17 \leq x \leq 35\}$

(ii) $B' = \{10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29\}$

$= \{x : x \leq 29\}$

10. Given universal set $= \{x \in Z ; -6 < \leq 6\}$, $N = \{n : n$ is a non negative number$\}$ and $P = \{x : x$ is a non-positive number$\}$

Find : (i) N' (ii) P'

Ans

Universal set $= \{x \in Z ; -6 < x \leq 6\}$

$= \{-5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6\}$

$N = \{n : n$ is a non negative number$\}$

$= \{0, 1, 2, 3, 4, 5, 6\}$

$P = \{x : x$ is a non-positive number$\}$

$= \{-5, -4, -3, -2, -1, 0\}$

(i) $N' = \{-5, -4, -3, -2, -1\}$

(ii) $P' = \{1, 2, 3, 4, 5, 6\}$

11. Let M = { letters of the word REAL } and N = { letters of the word LARE }. Write the sets M and N in roster form and then state whether:

(i) $M \subseteq N$ is true (ii) $N \subset M$ is true

(iii) $M = N$ is true.

Ans. $M = \{$ letters of the word REAL $\}$

$= \{R, E, A, L\}$

and $N = \{$ letters of the word LARE $\}$

$= \{L, A, R, E\}$

(i) $M \subseteq N$ is true : Yes

(ii) $N \subseteq M$ is true : Yes

(iii) $M = N$ is true : Yes