RD Sharma
Solutions
Class 11 Maths
Chapter 31
Ex 31.4

Mathematical Reasoning Ex 31.4 Q1

```
(i)
```

The negation of the statement For every $x \in N, x + 3 < 10$

is

There exists $x \in N$ such that $x + 3 \ge 10$.

(ii)

The negation of the statement

There exists $x \in N, x + 3 = 10$

İS

For every $x \in N, x + 3 \neq 10$

Mathematical Reasoning Ex 31.4 Q2

(i)

The negation of the statement

All the students completed their homework.

is

Some of the students did not complete their home work.

(ii)

The negation of the statement

There exists a number which is equal to its square.

is

For every real number $x, x^2 \neq x$.