

Exercise - 6(A)

i) $A_1 = \{x : 2x + 3 = 11\}$

$$2x + 3 = 11$$

$$2x = 11 - 3$$

$$2x = 8$$

$$x = \frac{8}{2} \Rightarrow x = 4$$

ii) $A_3 = \{x : x \in \mathbb{Z}, -3 \leq x < 4\}$

$$-3 \leq x < 4$$

$$x = -3, -2, -1, 0, 1, 2, 3$$

$$A_3 = \{-3, -2, -1, 0, 1, 2, 3\}$$

iii) $A_4 = \{x : x \text{ is a two digit number and sum of the digits of } x \text{ is } 7\}$

= So, 2 digit numbers whose sum of digits is 7 = 16, 25, 34, 43, 52, 61, 70

So, the set is $A_4 = \{16, 25, 34, 43, 52, 61, 70\}$.