Exercise 9A

∴ x = 17

(iii) 4x = 28

We try several values of x until we get the L.H.S. equal to the R.H.S.

x	L.H.S.	R.H.S.	Is L.H.S. = R.H.S.?
1	4 × 1 = 4	28	No
2	4 × 2 = 8	28	No
3	4 × 3 = 12	28	No
4	4 × 4 = 16	28	No
5	4 × 5 = 20	28	No
6	4 × 6 = 24	28	No
7	4 × 7 = 28	28	Yes

∴ x = 7

(iv) 3y = 36

We try several values of x until we get the L.H.S. equal to the R.H.S.

y	L.H.S.	R.H.S.	Is L.H.S. = R.H.S.?
6	3 × 6 = 18	36	No
7	3 × 7 = 21	36	No
8	3 × 8 = 24	36	No
9	3 × 9 = 27	36	No
10	3 × 10 = 30	36	No
11	3 ×11 = 33	36	No
12	3 × 12 = 36	36	Yes

∴ y = 12

(v) 11 + x = 19

We try several values of x until we get the L.H.S. equal to the R.H.S.

x	L.H.S.	R.H.S.	Is L.H.S. = R.H.S.?
1	11 + 1 = 12	19	No
2	11 + 2 = 13	19	No
3	11 + 3 = 14	19	No
4	11 + 4 = 15	19	No
5	11 + 5 = 16	19	No
6	11 + 6 = 17	19	No
7	11 + 7 = 18	19	No
8	11 + 8 = 19	19	Yes

∴ x = 8

(vi) $\frac{x}{3} = 4$

Since R.H.S. is an natural number so L.H.S. must also be a natural number. Thus, x has to be a multiple of 3.

x	L.H.S.	R.H.S.	Is L.H.S. = R.H.S.?
3	$\frac{3}{3} = 1$	4	No
6	$\frac{6}{3} = 2$	4	No
9	$\frac{9}{3} = 3$	4	No
12	$\frac{12}{3} = 4$	4	Yes

∴ x = 12

(vii) $2x - 3 = 9$

We try several values of x until we get the L.H.S. equal to the R.H.S.

x	L.H.S.	R.H.S.	Is L.H.S. = R.H.S.?
1	$2 \times 1 - 3 = -1$	9	No
2	$2 \times 2 - 3 = 1$	9	No
3	$2 \times 3 - 3 = 3$	9	No
4	$2 \times 4 - 3 = 5$	9	No
5	$2 \times 5 - 3 = 7$	9	No
6	$2 \times 6 - 3 = 9$	9	Yes

∴ x = 6

********** END **********