



### Exercise 9A

(viii)  $\frac{1}{2}x + 7 = 11$

Since, R.H.S. is a natural number so L.H.S. must be a natural number Thus, we will try values if x which are multiples of 'x'

x	L.H.S.	R.H.S.	Is L.H.S. = R.H.S.?
2	$2/2 + 7 = 8$	11	No
4	$4/2 + 7 = 9$	11	No
6	$6/2 + 7 = 10$	11	No
8	$8/2 + 7 = 11$	11	Yes

$\therefore x = 8$

(ix)  $2y + 4 = 3y$

We try several values of y 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.?
1	$2 \times 1 + 4 = 6$	$3 \times 1 = 3$	No
2	$2 \times 2 + 4 = 8$	$3 \times 2 = 6$	No
3	$2 \times 3 + 4 = 10$	$3 \times 3 = 9$	No
4	$2 \times 4 + 4 = 12$	$3 \times 4 = 12$	Yes

$\therefore y = 4$

(x)  $z - 3 = 2z - 5$

We try several values of z till we get the L.H.S. equal to the R.H.S.

z	L.H.S.	R.H.S.	Is L.H.S. = R.H.S.?
1	$1 - 3 = -2$	$2 \times 1 - 5 = -3$	No
2	$2 - 3 = -1$	$2 \times 2 - 5 = -1$	Yes

$\therefore z = 2$

\*\*\*\*\* END \*\*\*\*\*