

Chapter - 4

Exercise - 4.1

- i. (i) No
- (ii) No
- (iii) Yes
- (iv) No
- (v) Yes
- (vi) No
- (vii) Yes
- (ix) No
- (x) No
- (xi) Yes

2] a) $m + 5 = 19$ ($m = 1$)
 $1 + 5 = 19$
 $6 \neq 19$

L.H.S \neq R.H.S, $m = 1$ is not the solⁿ of given eqⁿ

b) $7n + 5 = 19$ ($n = -2$)

$7(-2) + 5 = 19$
 $-14 + 5 = 19$
 $-9 \neq 19$

L.H.S \neq R.H.S, $n = -2$ is not the solⁿ of given eqⁿ

c) $7n + 5 = 19$ ($n = 2$)

$7 \times 2 + 5 = 19$
 $14 + 5 = 19$
 $19 = 19$

L.H.S = R.H.S, $n = 2$ is the solⁿ of given eqⁿ

d) $4p - 3 = 13$ ($p = 1$)

$4 \times 1 - 3 = 13$
 $4 - 3 = 13$
 $1 \neq 13$

L.H.S \neq R.H.S, $p = 1$ is not the solⁿ of given eqⁿ

(e) $4p - 3 = 13$ ($p = -4$)

$4 \times -4 - 3 = 13$

$-16 - 3 = 13$

$-19 \neq 13$

L.H.S \neq R.H.S, $p = -4$ is not the solⁿ of given eqn

(f) $4p - 3 = 13$ ($p = 0$)

$4 \times 0 - 3 = 13$

$0 - 3 = 13$

$-3 \neq 13$

L.H.S \neq R.H.S, $p = 0$ is not the solⁿ of given eqn

3. (i) $5p + 2 = 17$

For $p = 1$,

L.H.S = $5 \times 1 + 2 = 5 + 2 = 7 \neq 17$ (R.H.S)

For $p = 2$

L.H.S = $5 \times 2 + 2 = 10 + 2 = 12 \neq 17$ (R.H.S)

For $p = 3$

L.H.S = $5 \times 3 + 2 = 15 + 2 = 17 = 17$ (R.H.S)

Since the given eqn is satisfied for $p = 3$
Thus $p = 3$ is the required solution.

(ii) $3m - 14 = 4$

For $m = 1$, L.H.S = $3 \times 1 - 14 = -11 \neq 4$ (R.H.S)

For $m = 2$, L.H.S = $3 \times 2 - 14 = 6 - 14 = -8 \neq 4$ (R.H.S)

For $m = 3$, L.H.S = $3 \times 3 - 14 = 9 - 14 = -5 \neq 4$ (R.H.S)

For $m = 4$, L.H.S = $3 \times 4 - 14 = 12 - 14 = -2 \neq 4$ (R.H.S)

For $m = 5$, L.H.S = $3 \times 5 - 14 = 15 - 14 = 1 \neq 4$ (R.H.S)

For $m = 6$, L.H.S = $3 \times 6 - 14 = 18 - 14 = 4 = 4$ (R.H.S)

Since the given eqn is satisfied for $p = 6$
Thus $m = 6$ is the required solution.

4 (i) $x + 4 = 9$

(ii) $y - 2 = 8$

(iii) $10a = 70$

(iv) $b/5 = 6$

(v) $3/4 t = 15$

(vi) $7m + 7 = 77$

(vii) $\frac{x}{4} - 4 = 4$

(viii) $6y - 6 = 60$

(ix) $\frac{l}{3} + 3 = 30$

5 (i) $p + 4 = 15$

The sum of p and 4 is 15.

(ii) $m - 7 = 3$

7 subtracted from m is 3.

(iii) $2m = 7$

Twice a number m is 7.

(iv) $\frac{m}{5} = 3$

One-fifth of a number m is 3.

(v) $3m = 6$

Three-fifth of a number m is 6.

(vi) $3p + 4 = 25$

Three times a no. p when added to 4 gives 25.

(vii) $4p - 2 = 18$

2 subtracted from four times a no. p is 18.

(viii) $\frac{p}{2} + 2 = 8$

Add 2 to half of a number p to get 8.

6 (i) $5m + 7 = 37$

(ii) $3y + 4 = 49$

(iii) $2l + 7 = 87$

(iv) $4b = 180^\circ$