

NCERT solution Linear equation Exercise 1

Question 1:

Solve: $x-2=7$

Answer:

$$x - 2 = 7$$

Transposing 2 to R.H.S, we obtain

$$x = 7 + 2 = 9$$

Question 2:

Solve: $y+3=10$

Answer :

$$y + 3 = 10$$

Transposing 3 to R.H.S, we obtain

$$y = 10 - 3 = 7$$

Question 3:

Solve: $6=z+2$

Answer

$$6=z+2$$

Or

$$z+2=6$$

Transposing 2 to R.H.S, we obtain

$$z=6 - 2=4$$

Question 4

Solve:

$$\frac{3}{7} + x = \frac{17}{7}$$

Answer :

$$\frac{3}{7} + x = \frac{17}{7}$$

Multiplying 7 on both sides

$$3+7x=17$$

Transposing 3 to R.H.S, we obtain

$$7x=17-3=14$$

$$7x=14$$

Dividing both the sides by 7

$$x=2$$

Question 5:

Solve:

$$6x=12$$

Answer:

$$6x=12$$

Dividing both the sides by 6

$$x=2$$

Question 6:

Solve:

$$\frac{t}{5} = 10$$

Answer:

$$\frac{t}{5} = 10$$

Multiplying 5 on both sides

$$t=50$$

Question 7:

Solve

$$\frac{2x}{3} = 18$$

Answer:

$$\frac{2x}{3} = 18$$

Multiplying both the sides by 3

$$2x=54$$

Dividing both the sides by 2

$$x=27$$

Question 8:

Solve:

$$1.6 = \frac{y}{1.5}$$

Answer:

$$1.6 = \frac{y}{1.5}$$

Multiplying both the sides by 1.5

$$1.6 \times 1.5 = y$$

$$y=2.4$$

Question 9:

Solve:

$$7x-9=16$$

Answer:

$$7x-9=16$$

Transposing 9 to R.H.S, we obtain

$$7x=16+9$$

$$7x=25$$

Dividing by 7 on both the sides

$$x=25/7$$

Question 10:

Solve:

$$14y-8=13$$

Answer:

$$14y-8=13$$

Transposing 8 to R.H.S, we obtain

$$14y=13+8$$

$$14y=21$$

Dividing 14 on both the sides

$$y=21/14=3/2$$

Question 11:

Solve:

$$17+6p=9$$

Answer:

$$17+6p=9$$

Transposing 17 to R.H.S, we obtain

$$6p=9-17$$

$$6p=-8$$

Dividing 6 on both the sides

$$p=-8/6=-4/3$$

Question 12:

Solve:

$$\frac{x}{3}+1=\frac{7}{15}$$

Answer:

$$\frac{x}{3}+1=\frac{7}{15}$$

The LCM of denominator is 15, So multiplying both sides by 15

$$5x+15=7$$

Transposing 15 to R.H.S, we obtain

$$5x=-8$$

Dividing 5 on both the sides

$$x=-8/5$$