## Worksheet

- 1. State whether true or false.
  - a. Twice a number added to 15 gives 19 is written as 2x + 19 = 15.
  - b. A linear equation has two solutions.
  - c. 12 subtracted from 4 times x equals 0 is written as 4x 12 = 0.
- 2. Choose the correct answer.
  - a. The solution of the equation 4 z = 2 is

i 3

ii. 2

iii. 6

iv. 8

b. If the perimeter of a rectangle is 30 cm, then the sum of its length and breadth is

i. 60 cm

ii. 20 cm

iii. 15 cm

iv. 40 cm

c. The perimeter of a square with side x is 60 cm, so the length of its side is

i 15 cm

ii. 20 cm

iii. 16 cm

iv. 18 cm

- 3. If we add  $\frac{1}{4}$  th of a number to itself, we get 10. What is the number?
- 4. Solve:

a.  $2x + \frac{5}{3} = 2\frac{1}{4}x$ 

b.  $16 + \frac{9-x}{4} = \frac{10-4x}{3}$ 

c. 5(9x-2) + 3(6x-5) = 14

d.  $\frac{2}{3}(5x-3)=9+\frac{2}{5}(6-x)$ 

- 5. Check which one of x = 1, x = 0 and x = 5 is the solution of the equation 4x 2 = 18.
- 6. The sum of ages of a daughter and her mother is 55 years. If the mother is 35 years older than her daughter, what is the daughter's age? What will be their ages after 10 years?
- 7. The cost of a bed sheet exceeds the cost of a pillow set by ₹ 50. If 4 sheets and 2 pillow sets cost ₹ 800, what is the cost of

a. 1 bed sheet and 1 pillow set?

b. 10 bed sheets and 5 pillow sets?

- 8. The sum of two consecutive even numbers is 58. Find the numbers and find the product of the predecessor of the smaller number and the successor of the larger number.
- 9. The perimeter of an isosceles triangle ABC with AB = AC is 80 cm. If BC is the smallest side and it is less than AB by 10 cm, what are the lengths of all the three sides?
- Verify, if the numbers given in the brackets are the solutions to the respective equations or not.

a. 2x - 12 = 35 (x = 13)

b.  $x + \frac{x}{4} = 25 (x = 20)$ 

c.  $\frac{3x}{2} - \frac{2x}{3} = 15 (x = 9)$ 

- 11. A box has 200 books on Mathematics and Science. If the number of Mathematics books is 60 more than the number of Science books, find how many books of each type are there.
- Reena and Sheena wants to raise some money for charity. Reena raises ₹ 1000 12. more than Sheena and together they are able to raise ₹ 20,000. Find out how much did each one raised.
- 13. Three packet of juices and five ice creams cost a total of ₹95. If a packet of juice costs ₹ 5 more than an ice cream, find the cost of an ice cream.
- 14. Jia has twice as many dolls as Riya. Riya has 5 dolls more than Diya. If together they have 43 dolls, then how many dolls does each one of them have?

## **Answers to Worksheet**

1. a. False

b. False

c. True

2. a. ii

b. iii

c. i

3. 8

4. a.  $x = \frac{20}{3}$  b.  $x = \frac{-179}{13}$  c.  $x = \frac{13}{21}$  d.  $x = \frac{201}{56}$ 

5. x = 5

6. 10 years; 20 years and 55 years

7. a. ₹ 150 and ₹ 100

b. ₹ 2000

8. 28 and 30. Product = 837

9. BC = 20 cm, AB = AC = 30 cm 10. a. No

b. Yes

c. No

11. Mathematics-130, Science-70

12. Reena ₹ 10,500 and Sheena ₹ 9,500

13. ₹ 10

14. Diya-7, Riya-12 and Jia-24