A. Figure out the answers to these questions:

1. 2x +3 = 152x + 3 = 15

2. 4x − 5 = 3x +74x − 5 = 3x + 7

3. 12x + 4 = 10

4. 34x − 2 = 4

5. 5(x−2) =3x + 45(x − 2) = 3x + 4

B. Challenge yourself with these questions:

1. The sum of a number and 8 is 20. Find the number.

2. If 4 times a number is increased by 5, the result is 25. Find the number.

3. A number divided by 3 gives 7. Find the number.

4. The perimeter of a rectangle is 60 cm. If the length is xx and the breadth is x − 5x − 5, form a linear equation and find the length.

5. A shopkeeper sells a pen for ₹(x + 5) and a notebook for ₹(2x − 3). If the total cost is ₹42, find the cost of the pen.

C. Write the Missing Terms to Complete the Sentences:

1. A linear equation is said to have common terms if the same expression or variable appears on _____ sides of the equation.

2. To simplify an equation with common terms, we usually _____ or _____ the common terms from both sides.

3. In the equation x + 4 = x + 9x + 4 = x + 9, the common term is _____.

4. Removing the common term from both sides of an equation does not change the _____ of the equation.

5. The equation 2x + 3 = 2x + 72x + 3 = 2x + 7 has no solution because the variable terms are the same but the _____ terms are different.

6. In the equation 3x − 5 = x + 13x − 5 = x + 1, subtracting xx from both sides helps eliminate the _____ term.