Name - _ _ _ _ _ _ _ _   Start time - _ _ : _ _   End time - _ _ : _ _

Solve the following. Algebraic expressions.

1. Solve $2x + 3y = 11$ and $2x - 4y = -24$ and hence find the value of 'm' for which $y = mx + 3$.

2. The coach of a cricket team buys 7 bats and 6 balls for Rs.3800. Later, she buys 3 bats and 5 balls for Rs.1750. Find the cost of each bat and each ball.

3. A fraction becomes 9/11 if 2 is added to both the numerator and the denominator. If, 3 is added to both the numerator and the denominator it becomes 5/6. Find the fraction.

4. Form the pair of linear equations in the following problems, and find their solutions (if they exist) by the elimination method:

   (i)   Five years ago, Aly was thrice as old as Eli. Ten years later, Aly will be twice as old as Eli. How old are Aly and Eli?

   (ii)   A lending library has a fixed charge for the first three days and an additional charge for each day thereafter. Saritha paid Rs.27 for a book kept for seven days, while Rusy paid Rs.21 for the book she kept for five days. Find the fixed charge and the charge for each extra day.

5. Solve the following pair of linear equations by the substitution and cross-multiplication methods:
   $8x + 5y = 9, \quad 3x + 2y = 4$

1   2   3   4   5   6   7   8   9