

I. Answer in one word:

1. Identity 2. $a^2 - 2ab + b^2$ 3. $x^2 + (a + b)x + ab$

4. Equation 5. $p^2 - q^2$

II. Answer the following:

6. $(a + b) [7a + 3b]$
= $a [7a + 3b] + b [7a + 3b]$
= $7a^2 + 3ab + 7ab + 3b^2$
= $7a^2 + 10ab + 3b^2$

7. $(x + 9)^2$
= $x^2 + 2 \times (x) \times (9) + 9^2$
= $x^2 + 18x + 81$ $(a + b)^2 = a^2 + 2ab + b^2$

8. a) $(3x)^2 - 9^2$ b) 10
 $9x^2 - 81$

9. $(105)^2 = (100 + 5)^2$
= $100^2 + 2 \times 100 \times 5 + 5^2$
= $10000 + 1000 + 25$ = 11,025

10. $(a + b) (8a + 9b + 10c)$
= $8a^2 + 9ab + 10ac + 8ab + 9b^2 + 10bc$
= $8a^2 + 9b^2 + 17ab + 10ac + 10bc$