Teacher Name: Ambreen Badar Class: 8 Subject: Mathematics Date: 10th February 2017

Topic: Expansion and Factorisation of algebraic expressions

**Q1: Expand each of the following:**

1. 4 (5h – 7k)
2. -8 (4p – 9q)
3. 9a (-4a + 7b)
4. -7y (-3x -4y)
5. 11(5x - 7) + 9(2 – 3x)
6. 5x (-2x -3y) + (-x + 3y)
7. (x + 11) ( x – 7)
8. (x2 + 3)(2x – 4)
9. (x + 3)(x2 – 3x + 9)
10. (3 – a)(9 + 3a + a2)

**Q2: Expand each of the following:**

1. (5y +4z)2
2. (6x -7)2
3. (8x +$\frac{y}{3}$)2
4. (9m – 3n)2
5. (3x2 + 8)2

**Q3: Evaluate the following by using an algebraic identity:**

1. (903)2
2. (97)2
3. 1208 × 1192
4. (988)2
5. (704)2
6. 110 × 90

**Q4: Factorise each of the following:**

1. 24x +16
2. 2a2b3c – 8ab2c3
3. 6a2 + 8a3 – 10a5
4. 2ax -4ay + 3bx – 6by
5. 3xy + 6y – 5x – 10
6. x2z – 4y - x2y + 4z
7. 16a2 + 40ab + 25b2
8. 49x2 – 28xy + 4b2
9. 2x2 + 8x – 42
10. x2 – 10x – 171
11. (x - 3)2 – 16y2
12. 3x2 – 36xy + 108y2
13. 18x3 – 8xy3