Relation in the Sequence of Odd Numbers between Consecutive Square Numbers

1. **Complete the following patterns.**

   a. i) $1 \times 1 = 1 = 1$

   ii) $2 \times 2 = 4 = 1 + 3$

   iii) $3 \times 3 = 9 = 1 + 3 + 5$

   iv) $4 \times 4 =$ _____ $=$ $1 + 3 + 5 +$ _____

   v) $5 \times$ ___ $=$ _____ $=$ $1 + 3 + 5 +$ _____ $+$ _____

   b. i) $1 = 1 = (1 \times 1)$

   ii) $1 + 3 = 4 = (2 \times 2)$

   iii) _____ $+ 5 = 9 = (3 \times 3)$

   iv) $9 +$ _____ $= 16 = (4 \times 4)$

   v) $16 +$ _____ $=$ _____ $= (5 \times 5)$

   vi) $25 +$ _____ $= 36 = (6 \times 6)$

   vii) _____ $+$ _____ $= 49 = (7 \times 7)$

2. **Express the following square number as the sum of odd numbers:**

   a) 49 _____ **b) 121** _____

3. **Without actual adding find the following sums:**

   a. 1 + 3 + 5 + 7 + 9 = _____

   b. 1 + 3 + 5 + 7 + 9 + 11 + 13 = _____