## ONLINE MATHS CLASS- X - 34 ( 10 / 09 / 2021 )

## 4. SECOND DEGREE EQUATIONS - CLASS- 1 WORKSHEET

1) Consider the arithmetic sequence $5,8,11$, . .
a) What is its common difference ?
b) What is its algebraic form ?
c) If the square of a term of this sequence is $\mathbf{6 4 0 0}$, what is its position ?
2. When each side of a square is increased by 5 metres, the area becomes 900 square centimetres .
a) If the length of the original square is taken as $\boldsymbol{x}$ centimetres, what will be the length of the side of the new square ?
b) Compute the length of the original square .
3. A square ground has a 3 metres wide path all around it . The total area of the ground and the path is $\mathbf{1 6 0 0}$ square metres .
a) If the length of the ground is taken as $x$ metres, what will be the length of the side of the square formed by the ground and the path ?
b) Compute the area of the ground alone .
4. A box is made by cutting off small squares from each corner of a square of thick paper , and bending upwards. The height of the box is 10 centimetres and the volume is $\mathbf{4}$ litres
a) If the length of the paper is taken as $x$ centimetres, what will be the side of the base of the box ?
b) Compute the length of the side of the paper .
( Hint : 1 litre = 1000 cubic centimetres )
