

ONLINE MATHS CLASS - X – 38 (16 / 09 / 2021)

4 . SECOND DEGREE EQUATIONS - CLASS – 5 -WORKSHEET

Important points

- Any second degree polynomial can be put in the form $p(x) = ax^2 + bx + c$
- To get $ax^2 + bx + c = 0$, we must take $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

1) Complete the following table .

| $p(x) = 0$ | a | b | c | $b^2 - 4ac$ |
|----------------------|-----|-----|-----|--|
| $x^2 + 6x + 5 = 0$ | 1 | 6 | 5 | $6^2 - 4 \times 1 \times 5 = 36 - 20 = 16$ |
| $x^2 + 9x + 20 = 0$ | | | | |
| $x^2 + 11x + 28 = 0$ | | | | |
| $2x^2 + 3x + 1 = 0$ | | | | |
| $3x^2 + 7x + 2 = 0$ | | | | |
| $4x^2 + 13x + 3 = 0$ | | | | |

2) 5 added to the sum of the square of a number and 6 times that number gives 0 .

What are the numbers ?