

Immaculate Conception High School
Grade 10 Mathematics
Quadratic Equations Classwork
January 25, 2021

1. Factorise and solve the following

(i) $x^2 - x - 110 = 0$ [2]

(ii) $x^2 - 144 = 0$ [2]

(iii) $x^2 + 6x = 0$ [2]

(iv) $8x^2 + 18x + 9 = 0$ [4]

2. Use the quadratic formula to solve $6x^2 + 5x - 6 = 0$. [5]

3. A rectangle is x cm wide and 3 cm longer than its wide. If its area is 28 cm^2 , form an equation in x and solve it. Hence determine the dimensions of the rectangle. [5]

4. Solve the following pair of simultaneous equations

$y = 2x^2 - 3x - 8$ [7]

$y = 2x - 1$

[Total 27]