Quadratic and Simultaneous Equations

Maths

Statement Code no: 16

Student:

Class:

At Junior Certificate level the student can:

Solve quadratic and simultaneous equations and simplify algebraic fractions

Date Commenced: ☐☐/☐☐/☐☐ **Date Awarded:** ☐☐/☐☐/☐☐

Learning Targets - This has been demonstrated by your ability to:

1 Add and subtract algebraic fractions ☐☐☐

eg $\dfrac{x}{4} + \dfrac{x}{3}$ $\dfrac{2x+1}{3} - \dfrac{2x-3}{4}$

2 Solve equations containing algebraic fractions ☐☐☐

eg $\dfrac{x-3}{2} = 4$ $\dfrac{x-1}{2} = \dfrac{2x+1}{5}$

3 Simplify algebraic fractions ☐☐☐

eg $\dfrac{5x^2}{10x}$ $\dfrac{12xy^2}{3xy}$

4 Multiply algebraic fractions and simplify ☐☐☐

eg $\dfrac{3x}{y^2} \times \dfrac{y}{3}$

5 Divide algebraic fractions and simplify

eg $\dfrac{2x^2}{3} \div \dfrac{4x}{9}$

6 Solve quadratic equations ☐☐☐

eg $x^2 + 5x + 6 = 0$ $x^2 - 16x + 48 = 0$ $x^2 - 81 = 0$

7 Use quadratic equations to solve problems ☐☐☐

8 Solve simultaneous equations ☐☐☐

eg $x + y = 9$ $2x - 5y = 1$

$x - y = 3$ $5x + 3y = 18$

9 Use simultaneous equations to solve problems ☐☐☐

Work begun ⬤☐☐ | Work in progress ⬤⬤☐ | Work completed ⬤⬤⬤