

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 | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | eg $\frac{x}{4} + \frac{x}{3}$ $\frac{2x+1}{3} - \frac{2x-3}{4}$ | |
| 2 | Solve equations containing algebraic fractions | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | eg $\frac{x-3}{2} = 4$ $\frac{x-1}{2} = \frac{2x+1}{5}$ | |
| 3 | Simplify algebraic fractions | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | eg $\frac{5x^2}{10x}$ $\frac{12xy^2}{3xy}$ | |
| 4 | Multiply algebraic fractions and simplify | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | eg $\frac{3x}{y^2} \times \frac{y}{3}$ | |
| 5 | Divide algebraic fractions and simplify | |
| | eg $\frac{2x^2}{3} \div \frac{4x}{9}$ | |
| 6 | Solve quadratic equations | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | eg $x^2 + 5x + 6 = 0$ $x^2 - 16x + 48 = 0$ $x^2 - 81 = 0$ | |
| 7 | Use quadratic equations to solve problems | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 8 | Solve simultaneous equations | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | eg $x + y = 9$ $2x - 5y = 1$
$x - y = 3$ $5x + 3y = 18$ | |
| 9 | Use simultaneous equations to solve problems | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

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

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eg $\frac{5x^2}{10x} \quad \frac{12xy^2}{3xy}$
- Iolraigh codáin ailgéabracha agus simpligh □□□
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eg $x^2 + 5x + 6 = 0 \quad x^2 - 16x + 48 = 0 \quad x^2 - 81 = 0$
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- Réitigh comhchothromóidí □□□
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 $x - y = 3 \quad 5x + 3y = 18$
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