

# Knowledge and Application of Algebra

## Maths

Statement Code no: 10

Student:

Class:

At Junior Certificate level the student can:

Apply the knowledge and skills necessary to perform specified operations in algebra

Date Commenced: / /

Date Awarded: / /

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

- |   |  |
|---|--|
| 1 Understand and write simple equations   | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 2 Understand and apply the concepts of $x^2$ and $x^3$  | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 3 Find the value of expressions requiring one substitution<br>eg. $3x + 2$ when $x = 4$<br>eg. $5x - 4$ when $x = 3$                            | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 4 Find the value of expressions requiring two substitutions<br>eg. $5x - 3y$ when $x = 3$ and $y = 2$<br>eg. $3x + 2y$ when $x = 2$ and $y = 4$ | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 5 Simplify expressions eg. $4x + 6 + 4y + 7 + 2x - 3y$  | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 6 Simplify expressions containing a bracket eg. $3(x + 4) + 7$  | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 7 Simplify expressions containing two brackets eg. $3(x + 5) + 3(x - 4)$  | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 8 Solve basic equations eg. $x - 4 = 6$ eg $x + 3 = 7$ eg $3x = 15$   | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 9 Solve more challenging equations eg. $6x + 2 = 32$  | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 10 Solve equations containing a bracket eg. $6(x + 5) = 42$   | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

Work begun    | Work in progress    | Work completed