

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
eg. $3x + 2$ when $x = 4$
eg. $5x - 4$ when $x = 3$ | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 4 Find the value of expressions requiring two substitutions
eg. $5x - 3y$ when $x = 3$ and $y = 2$
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

Eolas ar Ailgéabar agus ar Conas é a Chur i bhFeidhm

Matamaitic

Cód Ráitis uimhir: 10

Dalta:

Rang:

Ag leibhéal an Teastais Shóisearaigh beidh dalta ábalta:

Úsáid a bhaint as an eolas agus as na scileanna is gá chun oibríochtaí ar leith an ailgéabair a dhéanamh

Dáta Tosaithe:

Dáta Bronnta:

Spríocanna Foghlama atá le baint amach agat:

- Tuig cothromóidí simplí agus scríobh iad
- Tuig na coincheapa x^2 agus x^3 agus cuir i bhfeidhm iad
- Aimsigh an luach atá ag slonn (expression), áit ar gá duit uimhir amháin a chur in ionad litreach amháin
m.sh. $3x + 2$ nuair atá $x = 4$
m.sh. $5x - 4$ nuair atá $x = 3$
- Aimsigh an luach atá ag slonn, áit ar gá duit dhá uimhir a chur in ionad dhá litir
m.sh. $5x - 3y$ nuair atá $x = 3$ agus $y = 2$
m.sh. $3x + 2y$ nuair atá $x = 2$ agus $y = 4$
- Simpligh slonn m.sh. $4x + 6 + 4y + 7 + 2x - 3y$
- Simpligh slonn a bhfuil lúibíní ann m.sh. $3(x + 4) + 7$
- Simpligh slonn a bhfuil dhá phéire lúibíní ann m.sh. $3(x + 5) + 3(x - 4)$
- Réitigh cothromóid bhunúsach m.sh. $x - 4 = 6$ m.sh. $x + 3 = 7$ m.sh. $3x = 15$
- Réitigh cothromóid níos deacra m.sh. $6x + 2 = 32$
- Réitigh cothromóidí le lúibíní m.sh. $6(x + 5) = 42$