

# Trigonometry

## Maths

Statement Code no: 12

Student:

Class:

At Junior Certificate level the student can:

## Use trigonometry to solve problems

Date Commenced: / /

Date Awarded: / /

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

- 1 Identify the hypotenuse, adjacent side and opposite side for a given angle in a right angled triangle
- 2 Use the Theorem of Pythagoras to work out the third side in a right angled triangle when the other two sides are known
- 3 Find the value of the sine of an angle in a right angled triangle
- 4 Find the value of the cosine of an angle in a right angled triangle
- 5 Find the value of the tangent of an angle in a right angled triangle
- 6 Use a scientific calculator to find the sine, cosine and tangent of any integer value of an angle up to  $90^\circ$
- 7 Use a scientific calculator to find the value of an angle, and round it to the nearest degree, when given its sine, cosine or tangent value
- 8 Calculate sides and angles in a right angled triangle
- 9 Solve problems involving angles of elevation
- 10 Solve problems involving angles of depression

Work begun    | Work in progress    | Work completed

# Triantánacht

## Matamaitic

Cód Ráitis uimhir: 12

Dalta:

Rang:

Ag leibhéal an Teastais Shóisearaigh beidh dalta ábalta:

## An triantánacht a úsáid chun fadhbanna a réiteach

Dáta Tosaithe:

Dáta Bronnta:

### Spríocanna Foghlama atá le baint amach agat:

- Aithin taobhagán, slios cóngarach agus slios urchomhaireach d'uillinn ar leith i dtriantán dronuilleach
- Úsáid teoirim Phótagaráis chun an tríú taobh de thriantán dronuilleach a oibriú amach nuair atá an dá thaobh eile ar eolas agat
- Oibrigh amach luach an tsínis atá ar uillinn i dtriantán dronuilleach
- Oibrigh amach luach an chomhshínis atá ar uillinn i dtriantán dronuilleach
- Oibrigh amach luach an tangaint atá ar uillinn i dtriantán dronuilleach
- Úsáid áireamhán eolaíochta chun síneas, comhshíneas agus tangaint ag aon luach slánuimhreach a fháil, suas go dtí  $90^\circ$
- Úsáid áireamhán eolaíochta, nuair a tugtar luachanna sínis, comhshínis agus tangaint duit, chun luach aon uillinne a fháil, agus slánaigh an toradh chuig an gcéim is gaire
- Ríomh taobhanna agus uillinneacha i dtriantán dronuilleach
- Réitigh fadhbanna a bhfuil baint acu le huillinneacha airde
- Réitigh fadhbanna a bhfuil baint acu le huillinneacha íslithe