

## Access to Higher Education Unit

This unit forms part of an Access to HE Diploma. This is a developmental unit so is only available as ungraded.

**Unit Title:** Use of Number: Numbers and Algebra

**Ungraded Unit Reference Number:** UD23DEV01

**Module:** Developmental

**Level:** Two (2)

**Credit Value:** Three (3)

**Minimum Guided Learning Hours:** 30

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Understand integers, decimals, place value and the basic language used to describe numbers	1.1 Order integers and decimal numbers of any size
	1.2 Identify factors (divisors), common factors, highest common factors, multiples, highest common multiples and prime numbers
	1.3 Identify squares, square roots and cubes for simple examples
2. Understand and use number operations observing order of precedence	2.1 Manually add, subtract, multiply and divide numbers in the range $(-1000 > x < 1000)$
	2.2 Manually perform calculations involving brackets and indices, observing order of precedence
3. Understand decimals and fractions and the relationships between them	3.1 Identify equivalent fractions from lists and prove equivalence by cancelling
	3.2 Identify fractions corresponding to the decimal part of a number and vice versa (including recurring decimals)
	3.3 Add, subtract, multiply and divide simple fractions, giving answers in their simplest form
4. Understand the relationship between fractions and percentages and the practical uses of percentages	4.1 Convert fractions to percentages and percentages to fractions in their simplest forms

	4.2	Perform everyday calculations involving percentages, including reverse percentages
5. Understand some of the practical uses of algebra and graphs	5.1	Solve problems by deriving a formula in the form $y = mx$ and by plotting graphs and substitution
	5.2	Solve problems involving two related variable using simultaneous equations