Chief Examiner Report for Functional Skills Maths

NCFE Functional Skills Qualification in Mathematics at Level 1 – 501/2325/7
NCFE Functional Skills Qualification in Mathematics at Level 2 – 501/2324/5

August 2016

Level 1:

Fraction values and percentage values were often completed proficiently. However, although equivalencies between percentages and decimals generally showed establishment, equivalencies between fractions and percentages sometimes indicated that further practice would be beneficial. This was often indicated at tasks where learners needed to initially identify the proportion.

Ratio simplification often indicated familiarity and establishment. If errors were identified, these were often caused by arrangement or display. However, ratio use still appears as a common development area and further exploration of this area is recommended.

Range and mean tasks often indicated establishment. However, errors included range methods without answers and calculation errors with mean averages. Learners should be encouraged to check the accuracy of final responses throughout their assessments to reduce errors. This may also provide an opportunity to explore and reinforce appropriate checking methods.

Probability was indicated as a development area for many learners and errors included identification and display. Further practice is recommended, including accepted displays (unless a specific form is requested, display as a fraction in simplest form, percentage or decimal are acceptable).

Charts and graphs often indicated familiarisation including scales and pie chart angles, although a missing title was an error often identified.

Area and perimeter calculations were often completed correctly, although labelling of final answers did affect some responses. Problem solving with measure, for example, using division to identify quantities often indicated lack of familiarity and exam preparation should include a variety of stretching tasks within Measure, Shape and Space to provide learners with more experience.

Level 2:

Generally, percentage or fraction values were mostly calculated correctly. However, assessments indicated that identifying original values after a given change was a challenging area for learners. Converting proportions to lowest fraction form, to percentages, or to decimals were often completed accurately although converting percentages to fractions, and displaying in lowest form, was indicated as a common development area.

Ratio simplification was often completed correctly although sometimes affected by inappropriate display or order.

Scale was often used accurately but creating a scale for a given distance often indicated a lack of familiarity.

Tasks with averages and range were generally completed proficiently. However, there were instances where averages' methods had become confused. Further exploration on the use, or purpose, of different averages may benefit some learners, and may support comparisons or conclusions.

Graph production was generally proficient, although it was indicated that re-visiting pie chart production, including calculation of angles, may be useful for some learners.

Probability was indicated as a development area for many learners and errors included identification and display. Further practice is recommended, including accepted displays (unless a specific form is requested, display as a fraction in simplest form, percentage or decimal are acceptable).

Although working within metric measure often indicated establishment, converting between imperial and metric systems was indicated as a development area for many. Further practice selecting division or multiplication to convert may be beneficial as this was often identified as the cause of an error.

Calculating area and volume often indicated establishment, although internal volume, and area or volume of a composite shape, often indicated lack of familiarity. Similarly, further practice with a range of tasks that require problem solving incorporating measure may provide further support, and experience, for learners preparing for assessment.

Formulae use was often indicated as a development area. Common errors included differentiating radius and diameter, squared values, and accuracy with substitution (including appropriate units).

Generic Overview:

I would recommend that labelling of final responses with units and display of final answers to the requested level of accuracy should be reiterated to learners preparing for assessment. It may also be useful to incorporate practice with rounding and accuracy displays, so that rounding or requested displays don't affect accuracy of final answers. This was particularly noted with Level 2 learners, but will also be of benefit to Level 1 learners.

Exploration, or advice, with vocabulary to increase familiarity with requests (for example, to the nearest penny, or to 2 decimal places) may provide support for some learners.

Learners may benefit from further advice on arrangement or accepted display, for example, for ratio, area and probability. For learners completing final assessments on-line, it may be beneficial to check familiarisation with keyboards, for example, ratio display (using a colon and 'to' are both acceptable, for example, 1:3 or 1 to 3) and area (m sq and m2 are both acceptable).

It may also be useful to inform learners that graphs and charts are marked with set levels of tolerance so, for example, bars in on-line assessments may settle a small distance from where 'dragged', which is acceptable.

Additionally, check requests are often not appropriate or not attempted by learners, indicating lack of familiarity. Support exploring reverse calculations, as well as alternative methods and checks using estimation would be beneficial for learners preparing for final assessment. A repeat of a calculation, or an explanation of the method, isn't acceptable.

Chief Examiner: Felicity Black

Date: August 2016