# 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

## October 2016

## Level 1:

**Skill standard - Representing:**

Learners should be prepared to understand practical problems, whether familiar or unfamiliar. However, although problems with time or money were generally correctly answered, problems within Measure, Shape and Space often contained errors in approach. These errors were often caused by the initial identification of dimensions or by the selection of method, for example, selecting perimeter rather than area.

Unfamiliarity may be an affecting factor for learners identifying information from task instructions or diagrams. However, many learners demonstrated establishment identifying information from charts or graphs, for example, using information in a table to calculate a range or a mean average, or using a bar graph to identify task values. This may be an indicator of familiarity and sufficient practice. Further practice, prior to final assessment, with tasks that require identification of information from diagrams or written instructions may be useful in increasing familiarity.

Learners successfully demonstrated appropriate selections of mathematics to apply in several areas, for example, selecting subtraction to identify a difference. However, selections for tasks requiring proportional problem solving, for example, identifying lengths or widths in a given shape using division demonstrated less appropriateness.

**Skills standard – Analysing:**

Applying appropriate approaches or methods often affected tasks requesting probability, proportions as percentages, area (perimeter was often applied) and ratio use. However, more familiarity was demonstrated with tasks requesting, fraction values and percentage values, ratio simplification, range and mean average.

The amount of no responses, or inappropriate responses, to check requests indicates that further advice or support on reverse calculations would be beneficial. Incorporating practice within a range of tasks may support learners' experience and understanding, and increase familiarity with expectations.

**Skills standard – Interpreting:**

Tasks requiring interpreting and communicating solutions have resulted in mixed responses. Often, diagrams or graphs and charts were completed accurately although tables without headings were common. However, comments or explanations were often insufficient, for example, a 'difference' rather than 'bigger' or 'smaller'.

It is also important that learners are reminded to display final answers with appropriate units. For learners completing final assessments on-line, it will be beneficial to advise that m sq and $m^2$ are both acceptable, and to provide advice on fraction displays (for example, 1/4) and ratio displays (for example, 2:3).

## Level 2:

**Skill standard - Representing:**

Many learners demonstrated establishment identifying methods and choosing from a range of mathematics in familiar contexts, for example, applying multiplication or addition when working with money. However, errors with unit consistency or converting between pence and pounds have often affected accuracy.

In unfamiliar contexts, identification and choices have not always been appropriate, for example, identifying and applying division to calculate objects or amounts in a given shape or distance. The identification of the problem to solve and how to proceed is a common area of challenge and further practice with problem solving, using a step by step approach, may be beneficial for learners preparing for final assessment.

**Skills standard – Analysing:**

Learners often correctly applied mathematical methods such as range, scale use, averages and ratio simplification. However, applying formulae, equivalencies between fractions, decimals and percentages, devising appropriate scales, and probability indicated a lack of consistency with establishment. Often, when learners have not yet achieved at final assessment, a wide enough range of methods hasn't been demonstrated.

Displaying appropriate checks, when requested, remains an area that requires development and support should include advice on checks using reverse calculations and checks using estimation.

**Skills standard – Interpreting:**

Straightforward conclusions, for example, whether a target or aim has been met have mostly been accurate. However, responses to requested comments on task results have indicated that learners have found this challenging. Further preparation on open responses, for example, comparing averages or speed may support learners preparing for final assessment.

Generally, establishment with bars and graphs was demonstrated, although labels were often insufficient and titles often didn't accurately reflect the data displayed. Similarly, it was not uncommon to identify final answers that weren't displayed in accordance with the task instructions, for example, to the nearest whole number or the nearest penny. Additionally, further advice on expressions of probability, ratio and fractions may be beneficial prior to final assessment.

It is also important that learners are reminded to display final answers with appropriate units. For learners completing final assessments on-line, it will be beneficial to advise that m sq and $m^2$ are both acceptable, and to provide advice on fraction displays (for example, 4/9) and ratio displays (for example, 5:7).

## Generic Overview:

Errors at the initial stages of tasks are common. Care in identifying initial information is vital, whether dimensions (for example, internal volume), unit consistency (for example, pounds and pence), or task instructions.

Similarly, care in presenting information is important. Displays of calculations and approaches, whether on-line or paper based, were generally clear and sufficient (often resulting in part marks). However, final answers were often not displayed in accordance with task instructions (for example, to 2 decimal places), or with appropriate units (for example, area as $m^2$ or m sq).

Additionally, I would recommend that practice using checks is incorporated within preparation for final assessment, to increase learners' familiarity and reduce the amount of no responses to check requests.

**Chief Examiner: Felicity Black**

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