edexcel

Examiners' Report

March 2017

Pearson Edexcel Functional Skills Mathematics Level 1 (FSM01)

Functional Skills Qualifications from Pearson

Functional Skills qualifications from Pearson, the world's leading learning company. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications website at qualifications.pearson.com. Alternatively, you can get in touch with us using the details on our contact us page.

Pearson: helping people progress, everywhere

Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your learners at: www.pearson.com/uk

March 2017
Publications Code FSM01_01_1703_ER

Introduction

Many learners found this paper accessible, this was encouraging to see.

General comments

Learners should be reminded of the correct notation for money.

A large number of learners answered questions numerically correctly without actually saying “Yes” or “No”. Centres must remind their learners to answer the demand in full, rather than just leave their numerical reasoning.

There is evidence to suggest that learners are not using a calculator or do not have a ruler. Centres must ensure that learners are equipped correctly.

A wide variety of attempts to secure the checking mark were seen but many were not valid checks of correct working.
When learners are asked to perform a ‘check’, centres should not direct learners to just reverse ‘something’. Checks should be ‘valid’ and may include reverse calculations, alternative methods or estimations

Section A

Question 1a

This question was very well done in the main, with most learners getting full marks. Learners should be encouraged to take note of anything written in bold, as a few placed the bananas next to the strawberries. For sorting/sequencing tasks, learners may benefit from using paper squares, one for each item, and using those to physically place the items in the required order. This may help to visualise what is trying to be achieved and be less intimidating than committing to paper solution, in the first instance.
Learners should be encouraged to check they have included all information, in this case fruits, in their answer. The use of highlighters or ticking off the information may help them check all options have been included.

Questions 1b

This was generally a very well answered question.
Some further reminders to be given for those learners who think that to get 15% you divide by 15. It would be good for the use of money and units to be re-visited so that learners are not writing 69p as 0.69p. Learners should be reminded to give the units for the question even when not specifically asked to do so. Also, with discount questions, learners need to be clear on what the question is asking for, whether the discount itself, or the money to be given after the discount has been applied.
As this is a calculator paper learners should be taught to calculate percentages as 'out of a hundred' learning to enter the percentage as value divided by 100 multiplied by amount. Also correct money notation should be emphasised.

Question 2a

Learners need more exposure to real life instances of weight/mass. They need to develop fluency in converting units, perhaps creating a display using wrappers/packets from everyday grocery items may help in the understanding of units. Looking at prices on supermarket shelves noting the price per 100g etc. and considering which is the best value for money could increase their understanding of this topic. Often calculations are misunderstood with a description more profit for Norman, rather than actually better value.
Learners must be reminded that a check should be a reverse calculation, estimation or an alternative calculation and not a repeat of what they have done, which is quite often the case.

Question 2b

There were many correct answers with the use of incorrect units such as 23ft or 6 strips – more emphasis should be placed on the importance of including units in all stages of calculations.

Question 3a

Most learners chose unlikely and although only worth one mark, learners could be encouraged to write the answer as a fraction first, that may help them to get a better understanding of what choice to make. Re-visiting the definitions of the words associated with likelihood, may also prove useful and allow them to work with simple likelihoods and chance games to get an understanding of how likely it is to win with different starting points.

Question 3b

There is possibly some confusion over a data collection sheet as opposed to a questionnaire for individual customers or overall collection over a period of time– emphasis on this would identify how efficient it would be to use. Learners should include some examples within their table could help them to identify whether it is suitable for use. Learners should have the chance to discuss the purpose of the data collection sheet and ensure that they understand the wide range of formats this could take. Plan the form and complete the draft form as if the learner is a customer, ie, try to use it. In class time, learners could also encourage others to complete their form and give feedback. They would benefit from being aware of how to create a 2 way table and its efficiency over other types of table in this context.

Section B

Question 4(a)

Many learners misread the question, could not perform the basic calculations or did not provide a decision.
It does seem that many learners did not use a calculator. Centres must ensure that learners have access to a calculator when taking these papers.
A common error when adding 25.2 and 12, they did not include the .2, and some got the wrong total.
Another common error was to write down the wrong number of 12.6's or 12s.
It would improve responses if centres were to emphasise estimation as a method to see if additions had been performed correctly.
Learners should be encouraged – indeed directed – to provide a decision when the question asks for one.
This shows the need for careful reading.

Question 4(b)

It was pleasing to see that the many learners were able to substitute correctly into the number machine.
A wide variety of attempts to secure the checking mark were seen but many were not valid checks of correct working.
When learners are asked to perform a 'check', centres should not direct learners to just reverse 'something'. Checks should be 'valid' and may include reverse calculations, alternative methods or estimations

Question 5

Centres should encourage learners to break the question down into its component parts before attempting a solution.
The most common error was not fulfilling the criteria requested.
This involved

- Making up their own conditions
- Changing the times of the activities
- Having a longer lunch
- Not keeping in the time zone
- Not putting in the other activities
- Not returning to the cafe
- Not giving the start and finish times. The question specifically asked for start and finish times.

- Poor addition of times
- Failure to include the 10 minute walk times between activities

A table like the one below would be useful for practice

Activity	Start time	Finish time	Travel time

Question 6(a)

The majority of learners were able to add £1.20 four times and ascertain that the total comes to less than £5. A sizeable number of learners however thought that £0.2 represented 2p: this was not usually penalised.
A few didn't read the question and simply added the prices from the table.

Question 6(b)

Please encourage learners to read and then answer the question as it is stated.

Section C

Question 7a

Learners often calculated perimeter rather than area leading to 16 x 4 = 64.
Some failed to achieve full marks as failed to reach 15 to then compare with 17.5.
Centres should prepare learners by teaching them the difference between perimeter and area by explaining the differences using different descriptive examples such as a room, wall, playing field and a poster board. Learners should then practice different real life problems involving perimeter and area initially and then finding the amount of paint, carpet or tiles needed to cover them when given different figures for amounts required per $1m^2$, $5m^2$ and 10m. Learners would benefit from spotting the notation m^2 representing area and using this information to calculate area within the context of the question.

Question 7b

Many learners failed to include units and showed no process. On some occasions incorrect units were given. Many learners could not deal with ratio treating it as yellow is two more than blue.The check was either not carried out or just repeated working given previously.
Centres should teach learners to always give the correct units for their answer and whenever completing practice problems should always make sure learners give the units for their answer unless the question paper shows the units in the space for their answer. Yet again, learners would benefit from learning how to check their answer via a reverse process, estimation or alternative method. This is such a regular part of a functional skills question, it would benefit centres to spend some time ensuring learners understand exactly what is meant by a valid check.

Question 8

Many learners were able to secure a mark for one correct dimension. The display unit was the greatest challenge, either omitted or drawn incorrectly, in the wrong place. Centres need to prepare learners to be able to convert units from metres into centimetres by completing conversion problems and then practice scale drawings by putting different sized items such as chairs, tables, shelving units, display units onto paper using different scale factors. Centres should then practice similar problems to increase learners' ability to answer different types of questions involving scale and conversions. Learners need to practice metric conversions with scale drawings involving non-integer dimensions.

Question 9

Many learners failed to deal with one third. Some halved then halved again. Some multiplied by 0.3 Some forgot the delivery charge. Learners who carried out correct calculations then only gave the cheapest store. Centres should prepare learners by practicing reading and understanding the answer required to different questions involving different purchase options. Centres should encourage learners to underline the important numbers and various options offered in the question and the required answer as many learners only gave one store when the correct answer was two stores. Learners should practice questions involving purchase options – holidays, plants, party venues etc Learners need to practice calculating fractions of an amount. To deduct an amount is not a skill required at Level 1.