Examiners' Report

October 2015

Pearson Edexcel Functional Skills Mathematics Level 2 (FSM02)

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk. Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. 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 students at: www.pearson.com/uk

General comments

The majority of candidates attempted all questions; there were very few blank responses seen. There was some evidence that not all candidates had access to a ruler which disadvantaged them in drawing geometrical shapes inaccurately on the grid.

The majority of candidates presented their working but there were few instances where the calculations were not clearly organised or missing. This led to some candidates missing out on process marks. Candidates should be encouraged to present all their calculations, however simple, and do so in an organised and logical order. This also applies to showing what units they are working with throughout, i.e. cm, £, minutes etc.

Candidates engaged with a variety of contexts and responded to tasks well in most cases. However, there were some instances where candidates misinterpreted the results of their calculations and their final answer was incorrect. Candidates should be encouraged to carefully consider the context and the demand when making their final decision and show the check of their calculations, especially when explicitly asked to do so.

There are a few areas that the candidates should work on. These include understanding when it is appropriate to rounding their figures – some candidates unnecessarily do so in the intermediate stages of their process which leads to inaccurate final decision, others do not round when it is necessary when dealing with indivisible items; converting between units, especially distance and time; concept of an area of a rectangle, specifically identifying its dimensions or engaging with its coverage with smaller rectangular pieces (e.g. rolls of turf); and summarising large sets of data in an efficient table.

Section A

Question 1
The majority of candidates were successful in engaging with the scale and found the correct size of the shed. However, some failed to follow the constraints in the question about its placement in the corner. Some candidates did not engage with the concept of area in this question even though the proved to have understood the scale. There was also some evidence that candidates did not use rulers when drawing on the grid which led to some inaccurate responses. Candidates should also be encouraged to label their responses when drawing geometrical shapes on a grid.

Question 2a
Candidates had divergent success in answering this question mainly due to incorrect rounding - either not rounding to a whole number or not engaging with the concept of buying turf in multiples of 10, i.e. working with 26.98.. or 27 rather than 30. Some candidates did not use the true area method and that also led to losing some marks. Candidates should focus on the concept of covering an area with smaller units, i.e. rectangular pieces, tiles etc. and realise when it is functional to round their figures in the intermediate stages of their calculations. This was also a question where the calculations were occasionally presented in an unorganised way.

Question 2b
Most candidates were successful in finding the correct figures in the ratio but some misinterpreted these and stated incorrect answer. The required check of their calculations was often missing.

Question 3
Despite the fact that the demand clearly states that the pattern requires rotational symmetry only minority of candidates found the fully correct pattern. Most candidates used one or two lines of symmetry with adjacent quadrants and hence did not receive full marks.

Section B

Question 4a
This question was generally done well and candidates showed evidence of understating the concept of discounts expressed in percentage or fractions. However, some candidates made an error due to not following all of the instructions. The second offer gave 1/5 off the hotel price only yet some candidates worked with the 1/5 off the total price. This was also a question where the calculations were occasionally presented in an unorganised way.

Question 4b
This question was general done well with only a few candidates misinterpreting their figures and giving incorrect answer. Again, the required check of candidates' working was seldom seen.

Question 5
Majority of candidates engaged with this question and were successful in finding the correct figures and stating the correct answer. Only few candidates made an error of rounding their 5.4 kg to 6 kg, hence misinterpreting the concept of paying for the whole kg and missing a couple of marks.

Question 6
Success in this question was varied. While majority of the candidates knew how to substitute in the formula they did not show the understating of converting time units and frequently presented 10 hours and 20 minutes as 10.2 hours rather than 10.333… or presented the time in minutes even though the formula asked for time in hours. Candidates should work more on dealing with time units and the correct conversion process. It is also advisable that they write units next to each calculation so that they avoid confusing minutes and hours or units of distance, speed and time. This question also asked for evaluation and this was rarely seen, even when fully correct processes were seen.

Section C

Question 7a
This question was generally done well. However, a few candidates did not present their answer in correct money notation and some did not present the check of their working as required. Candidates should be encouraged to present their answer in correct money notation every time where it's appropriate and always to show a check of their working.

Question 7b
Majority of candidates were successful in finding the correct figures and stating correct answer. Only few misinterpreted their figures and gave incorrect answer or made an error in calculations with time (mostly taking away where they should be adding).

Question 8a and 8b
This question was not done very well. Some candidates presented only partially efficient summary table that would not work functionally. A few candidates were able to create an efficient summary table but failed to present the information in it correctly, often giving totals of apps in each category rather than the number of people who responded to the survey. Part "b" of this question asked for an evaluation and majority of candidates who provide their explanation were successful in gaining this mark.

Question 8c
This question was done well. Majority of candidates showed fully correct process to find the mean and most of them interpreted their figures correctly to give appropriate final answer.