Edexcel

# Reformed Functional Skills Mathematics at Entry 3 

First teaching September 2019

## Set 3

Mark scheme

## Functional Skills qualifications from Pearson

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## General guidance on the use of the mark scheme

1. Where the answer is a number, accept:

- figures
- words in any understandable spelling.

2. Where the mark scheme states 'indicates', accept any clear indication, for example:

- tick
- cross
- underline
- circling
- highlighting.

3. If the answer is clearly given, accept even if it is not in the answer box.
4. If the answer is in words, accept any understandable spelling.
5. Units can be ignored unless required explicitly by the mark scheme.
6. Where a mark is available for correct money format, accept correct use of the appropriate symbol with decimal notation e.g. $£ 28.50$. Do not accept $£ 28.5$ or $£ 28.50$ p or $28.50 £$.
7. Information in brackets is optional and it is not required to award marks.
8. Mark crossed-out work if it is legible and has not been replaced.
9. Where more than one response is indicated, award a mark only if all incorrect responses are crossed out.
10. 'Valid process' means any method that is complete and correct.
11. Where the mark scheme states ' 1 or' and ' 2 ' marks, see example below.

|  | Valid working e.g. <br> $350+150$ <br> $(£) 500$ | 1 or <br> 2 |  |
| :--- | :--- | :---: | :---: |


| Candidate answer <br> examples | Mark <br> awarded | Explanation |
| :--- | :---: | :--- |
| 500 | 2 | No process shown, correct answer |
| $350+150=500$ | 2 | Valid process and correct answer |
| $350+100=500$ | 2 | Process not valid, correct answer |
| $150+350$ | 1 | Valid process, no answer |
| $350+150=600$ | 1 | Valid process, wrong answer |
| $350+100=450$ | 0 | Process not valid, wrong answer |

Mark scheme, Section A - Non-calculator

| Question | Answer | Mark(s) | Content |
| :---: | :---: | :---: | :---: |
| 1 | Valid process to add 169 to 245 e.g. $169+245$ <br> (£) 414 | 1 or <br> 2 | E3.2 <br> E3.2 |
| 2 | Valid process to work out total spending money e.g. $25 \times 14$ <br> (£) 350 | 1 or $2$ | E3.4 <br> E3.4 |
| 3 | Valid process to work with distance e.g. $\begin{aligned} & 1000-400 \text { OR } \\ & 1000-400-400 \text { OR } \\ & 1000 \div 2 \text { OR } \\ & 400 \times 2 \text { AND } 1000 \end{aligned}$ <br> No AND 600 (m) OR <br> No AND 200 (m) difference OR <br> No AND 500 (m) OR <br> No AND 800 (m) AND 1000 (m) <br> Accept equivalents in kilometres <br> Working must be shown in consistent units | 1 or $2$ | E3.15 E3.15 |
| 4 | Valid process to find the number of full groups e.g. <br> $138 \div 12$ OR <br> $12+12+12+12+12+12+12+12+12+12+12$ <br> 11 (teams) OR <br> 6 (people in the small group) <br> 11 (teams) AND 6 (people in the small group) <br> Accept only if 11 is clearly the number of teams and 6 is clearly the number of people in the small group <br> e,g. 11 r 6 | 1 or <br> 2 or <br> 3 | E3.3 <br> E3.3 <br> E3.3 |

Total marks for Section A: 9

Mark scheme, Section B - Calculator

| Question | Answer | Mark(s) | Content |
| :---: | :---: | :---: | :---: |
| 1 | Correct values from chart i.e. <br> 94(mm) AND 48(mm) <br> OR <br> Valid process to make a comparison using 1 correct value from the chart e.g. $\begin{aligned} & 92-48 \mathrm{OR} \\ & 48 \times 2 \mathrm{OR} \\ & 94 \div 2 \end{aligned}$ <br> Valid process to make a comparison using both correct values from chart e.g. <br> 94-48 OR <br> $48 \times 2$ AND 94 OR <br> $94 \div 2$ AND 48 <br> No AND 46 (mm) OR <br> No AND 2 (mm difference) OR <br> No AND 96 (mm) AND 94 (mm) OR <br> No AND 47(mm) AND 48 (mm) OR <br> No AND 1 (mm difference) | 1 or <br> 2 or <br> 3 | E3.22 <br> E3.22 <br> E3.22 |
| 2 | (Cottage) E OR (£)783 and no other | 1 | E3.1 |
| 3 | Valid process to find cost per person e.g. $296 \div 4$ <br> (£) 74 | 1 or $2$ | E3.3 E3.3 |
| 4 a | 300 | 1 | E3.5 |
| 4b | Correct answer for the check using the rounded number i.e. $(300 \div 4=) 75$ <br> Award this mark for a correct answer based on 296 incorrectly rounded i.e. using 200 rather than 300 <br> Accept a valid check using 300 but based on their incorrect calculation e.g. <br> $296 \times 4$ in question 3 with a check of $(300 \times 4=) 1200$ | 1 | E3.5 |


| Question | Answer |  |  | Mark(s) | Content |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | Designs a table structure with suitable column headings e.g. 'Activity' and 'Time' and 'Cost' with correct values e.g. <br> Data headings may be shown in a row or a column. <br> Each data row/column must include correct values but may appear in any order as long as they correspond to the correct data headings. <br> $£$ sign and hours may be seen in data heading instead of with each amount. <br> Accept $h$ for hours <br> Accept table without borders |  |  | 1 | E3.23 |
| 6 | Indicates 7.55 am and no other |  |  | 1 | E3.12 |
| 7 | Completes an appropriate vertical scale i.e. <br> $0,100,200,300$ evenly spaced as labels for existing <br> gridlines <br> Completes appropriate vertical scale AND <br> Draws bars with correct heights in the correct position i.e. <br> 220 for A <br> 260 for B <br> 140 for C |  |  | 1 or 2 | E3.23 E3.23 |
| 8 | Indicates and no other |  |  | 1 | E3.19 |
| 9 | No AND 3 (people) OR <br> No AND 2 (people difference) OR <br> No AND $\frac{1}{3}$ OR <br> No AND 25 (people) by multiplying 5 people by 5 |  |  | 1 | E3.7 |
| 10 | Indicates 15:15 and no other |  |  | 1 | E3.13 |
| 11 | Indicates 1.98(m) and no other |  |  | 1 | E3.8 |


| Question | Answer | Mark(s) | Content |
| :---: | :---: | :---: | :---: |
| 12 | Indicates a route starting and ending at the cottage with at least 3 different stages regardless of total length e.g. <br> Cottage $\Rightarrow$ farm $\Rightarrow$ woods $\Rightarrow$ cottage $\Rightarrow$ village $\Rightarrow$ cottage OR <br> Cottage $\Rightarrow$ farm $\Rightarrow$ beach $\leftrightharpoons$ village $\Rightarrow$ woods $\Rightarrow$ cottage <br> Cottage $\Rightarrow$ farm $\Rightarrow$ woods $\leftrightharpoons$ village $\Rightarrow$ cottage OR <br> Cottage $\leftrightharpoons$ village $\Rightarrow$ woods $\Rightarrow$ farm $\Rightarrow$ cottage <br> Accept a route clearly shown on the diagram <br> Accept distances in the correct order instead of names <br> e.g. $2(\mathrm{~km} \Rightarrow) 4(\mathrm{~km} \Rightarrow) 3$ (km $\Rightarrow$ ) $2(\mathrm{~km})$ | 1 or $2$ | E3.21 E3.21 |
| 13 | $\frac{1}{2}$ (turn) or equivalent fraction Accept in words, e.g. one half | 1 | E3.20 |
| 14 | 160 (tea bags) | 1 | E3.6 |
| 15 | Valid process to find the total e.g. $2.89+0.81 \text { OR } 289+81$ <br> 3.7(0) OR 370 <br> Correct $£$ symbol and money notation used i.e. two decimal places and not $£ 3.70$ p Award this mark for correct $£$ symbol and money notation shown on an incorrect total | 1 or <br> 2 <br> 1 | $\begin{aligned} & \mathrm{E} 3.10 \\ & \mathrm{E} 3.10 \\ & \mathrm{E} 3.10 \end{aligned}$ |


| Question | Answer | Mark(s) | Content |
| :---: | :--- | :---: | :---: |
| 16 | $160(\mathrm{ml})$ OR <br> $500(\mathrm{ml})$ written or indicated on the scale OR <br> Valid process to find the total amount using an <br> incorrect reading from the scale e.g. 130 + 440 <br> $500-160$ OR <br> $500-440$ OR <br> $160+440$ AND 500 <br> Accept if shown on the scale e.g. the level of milk <br> labelled 160 (ml) on the diagram AND 500 (ml) indicated | E3.14 |  |
| No AND 340 (ml) OR <br> No AND 60 (ml) AND 160 (ml) OR <br> No AND 600 (ml) AND 500 (ml) OR <br> No AND 100 (ml difference) <br> Accept equivalents in litres <br> Working must be shown in consistent units | E3.17 | 3 | E3.17 |
| 17 | $80(\mathrm{~g})$ | 1 | E3.18 |

Total marks for Section B: 27

Total marks for assessment: 36

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