WJEC 2014 Online Exam Review

GCSE Mathematics Linear 2 4370-04

All Candidates' performance across questions

| Question Title | $N$ | Mean | S D | Max Mark | F F | Attempt \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 19206 | 5.1 | 1.3 | 6 | 84.3 | 99.6 |
| 2 | 19158 | 3.1 | 0.9 | 4 | 77.9 | 99.4 |
| 3 | 19204 | 4.3 | 2.3 | 7 | 61.7 | 99.6 |
| 4a | 18888 | 2.1 | 0.9 | 3 | 70.5 | 98 |
| 4b | 18676 | 1.7 | 0.6 | 2 | 84.2 | 96.9 |
| 5 | 18885 | 2 | 1.3 | 4 | 51 | 97.9 |
| 6 | 19239 | 3.9 | 1 | 5 | 78.7 | 99.8 |
| 7 | 19189 | 2.6 | 1.6 | 5 | 51.3 | 99.5 |
| 8 | 18627 | 3.9 | 2.5 | 8 | 49 | 96.6 |
| 9a | 19088 | 1.2 | 0.5 | 2 | 58.2 | 99 |
| 9b | 17113 | 1.4 | 0.9 | 3 | 46 | 88.8 |
| 9c | 18092 | 1.7 | 0.6 | 2 | 83.7 | 93.8 |
| 10 | 18319 | 3.8 | 2.3 | 6 | 62.6 | 95 |
| 11 | 17942 | 3.4 | 2 | 6 | 56.8 | 93 |
| 12 | 18270 | 2.8 | 1.4 | 4 | 68.8 | 94.8 |
| 13a | 17436 | 0.2 | 0.7 | 3 | 8.2 | 90.4 |
| 13b | 14988 | 0.9 | 1 | 2 | 42.8 | 77.7 |
| 14a | 18310 | 0.2 | 0.5 | 2 | 10.3 | 95 |
| 14b | 16166 | 1.3 | 1.1 | 3 | 42.4 | 83.8 |
| 15 | 15852 | 1 | 1.2 | 4 | 25.5 | 82.2 |
| 16 | 16146 | 1.2 | 1.4 | 6 | 20 | 83.7 |
| 17a | 16262 | 0.2 | 0.4 | 1 | 23.2 | 84.3 |
| 17b | 12688 | 0.6 | 1.2 | 4 | 15.4 | 65.8 |
| 17c | 12964 | 0.9 | 1.3 | 4 | 22.7 | 67.2 |
| 17d | 16628 | 1.3 | 1.3 | 4 | 32.3 | 86.2 |

GCSE Mathematics Linear 2 4370-04

3. (b) You will be assessed on the quality of your written communication in this part of the question.

Five identical cubes are now placed as shown.
Find how much one cube weighs.

3. b

$$
\begin{aligned}
& 620-320=300 \\
& \text { cubes }=300 \mathrm{~g} \\
& 300 \div \text { cubes }=60 \mathrm{~g} \\
& \text { each cube is log }
\end{aligned}
$$

3. b

$$
\begin{aligned}
& 620-320=300 \\
& \text { cubes }=300 \mathrm{~g} \\
& 300 \div \text { cubes }=60 \mathrm{~g} \\
& \text { each cube is } \mathrm{bog}
\end{aligned}
$$

10. The ages (in years) of the 8 members of an evening class are as follows:

| 36 | 28 | 45 | 24 | 31 | 34 | 27 | 47 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

(a) (i) Find the range of the ages of the members of the class.
(ii) What was the range of their ages one year ago?

Give a reason for your answer.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
(b) Find the mean age of the members of the class.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
10. a
(ii) What was the range of their ages one year ago? Give a reason for your answer.
The range would be the same because they'd onyble a year younger and there wound still be 23 years between them.
$\qquad$
10. a
(ii) What was the range of their ages one year ago?

Give a reason for your answer.

$\qquad$
10. a
(ii) What was the range of their ages one year ago? Give a reason for your answer.
The range would be the same because they'd onybe a year younger and there would still be 23 years between then.

$\qquad$
10. a
(ii) What was the range of their ages one year ago?

Give a reason for your answer.

10.

$$
\begin{aligned}
& \text { (b) Find the mean age of the members of the class. } \\
& 36+28+45+24+31+34+27+42 \\
& 2272 \\
& 272 \div 8 \\
& =35 \quad \text { mean }=35
\end{aligned}
$$

$$
\begin{aligned}
& 36+28+45+24+31+34+274 \\
& 47 \div 8=34 .
\end{aligned}
$$

10. 

(b) Find the mean age of the members of the class.

$$
\begin{aligned}
& 24+27+28+31+34+36+45+47=272 \\
& 272: 8: 34 \text { yearsold }
\end{aligned}
$$

10. 

$$
\begin{aligned}
& \text { (b) Find the mean age of the members of the class. } \\
& 36+28+45+24+31+34+27+47 \\
& =272 \\
& 272 \div 8 \\
& =35 \quad \text { mean }=35
\end{aligned}
$$

$$
\begin{aligned}
& 36+28+45+24+31+34+274 \\
& 47 \div 8=34 .
\end{aligned}
$$

10. 

(b) Find the mean age of the members of the class.

$$
\begin{aligned}
& 24+27+28+31+34+36+45+47=272 \\
& 272: 8: 34 \text { years old }
\end{aligned}
$$

T T T T T T T T T T T T T T T T T T T T T T T T
13. (a) Using a ruler and a pair of compasses, construct an angle of $30^{\circ}$ at the point $A$ on the line
below.
13. (a) Using a ruler and a pair of compasses, construct an angle of $30^{\circ}$ at the point $A$ on the line
below.
[3]



## 13a Candidate C


14. (a) Draw a reflection of the triangle in the line $y=1$.

(b) Enlarge the shape shown on the grid by a scale factor of 2 , using $A$ as the centre of the enlargement.

14.
(b) Enlarge the shape shown on the grid by a scale factor of 2, using $A$ as the centre of the enlargement.

(b) Enlarge the shape shown on the grid by a scale factor of 2, using $A$ as the centre of the enlargement.

14.
(b) Enlarge the shape shown on the grid by a scale factor of 2 , using $A$ as the centre of the enlargement.


Q
$\square$
(b) Enlarge the shape shown on the grid by a scale factor of 2 , using $A$ as the centre of the
enlargement.


-
16. Claudia was given the following information.

UK Income Tax
April 2013 to April 2014
taxable income $=$ gross income - personal allowance

- personal allowance is $£ 9205$
- basic rate of tax: $20 \%$ on the first $£ 32255$ of taxable income
- higher rate tax: $40 \%$ is payable on all taxable income over $£ 32255$

During the tax year 2013 to 2014, Claudia's gross income was $£ 52250$.
Calculate the total amount of tax that Claudia should pay.
You must show all your working.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
16.

Candidate A

| $52,250-9205=43045$ |
| :--- |
| $20 \%$ of $32253=6831$ |
| 43645 z $32255=10790$ |
| $40 \%$ of $10790=4316$ |
| 43314 $6316+6451=10767$ |
| bast |
| Claudia should pay 110767 |

Candidate B

Calculate the total amount of tax that Claudia should pay. You must show all your working.

$$
52250-9205=43045
$$

$$
\begin{array}{r}
4+3045-32255=10790 \\
20 \%=6451 \\
40 \%=6,17218
\end{array}
$$

Claudia should pay f17218
16.

Candidate A

$40 \%$ of $10790=4316$
$4+316 \quad(316+648)=10767$
Claudia should pay 110767

Candidate B

Calculate the total amount of tax that Claudia should pay. You must show all your working.

$$
52250-9205=43045
$$

$43045-32255=10790$

$$
\begin{aligned}
& 20 \%=6451 \\
& 40 \%=6,17218
\end{aligned}
$$

Claudia should payfl 7218

