## AQA - Fractions, decimals and percentages - GCSE Mathematics Paper-3

1. May/2020/Paper_3F/No. 1

What is 6.2819 to 2 decimal places?
Circle your answer.
6.2
6.28
6.29
6.3
2. May/2020/Paper_3F/No.2
$50 \%$ of a number is 40
Circle the number.

80
800
2000
3. May/2020/Paper_3F/No. 6

Greg wants to buy a games console that costs $£ 267.50$
He already has $£ 125$
He will save $£ 7.50$ each week.
In how many weeks will he have saved enough?
[3 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer
4. May/2020/Paper_3F/No. 29

A rectangle has length 60 cm and width 40 cm

|  |
| :---: |
|  |
| 60 cm |

Not drawn accurately

The length decreases by $15 \%$
The width decreases by $10 \%$
Sue says,
"The perimeter decreases by $25 \%$ because $15 \%+10 \%$ is $25 \%$ "
Is she correct?
You must show calculations to support your answer.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
5. May/2020/Paper_3H/No. 3

Work out 320 as a percentage of 80
Circle your answer.
6. May/2020/Paper_3H/No. 14

A rectangle has length 60 cm and width 40 cm


The length decreases by $15 \%$
The width decreases by 10\%
Sue says,
"The perimeter decreases by $25 \%$ because $15 \%+10 \%$ is $25 \%$ "
Is she correct?
You must show calculations to support your answer.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
7. June/2019/Paper_3F/No. 5

Put these numbers in order from smallest to largest.

$$
\begin{array}{llll}
\frac{31}{40} & \frac{3}{4} & \frac{7}{10} & 0.725
\end{array}
$$

$\qquad$
$\qquad$
$\qquad$
$\qquad$

Smallest
$\qquad$
$\qquad$

Largest $\qquad$
8. June/2019/Paper_3H/No. 1

Work out $£ 1.50$ as a fraction of 60 p
Circle your answer.
$\frac{2}{5}$
$\frac{1}{4}$
$\frac{4}{1}$
$\frac{5}{2}$
9. June/2019/Paper_3H/No. 10

Mia wants to borrow $£ 6000$ and repay it, with interest, after two years.
She sees two offers for loans.


| Offer 2 |
| :---: |
| Compound interest |
| First year 1\% |
| Second year 5\% |

Mia says,
"I will pay back the same amount because the average of $1 \%$ and $5 \%$ is $3 \%$ "
Is she correct?
You must show your working.
[3 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
10. Nov/2019/Paper_3F/No. 5
(a) Convert $\frac{47}{8}$ to a mixed number.
[1 mark]
$\qquad$
$\qquad$

Answer $\qquad$
(b) Convert $\frac{61}{128}$ to a decimal.

Give your answer to 2 decimal places.
[2 marks]
$\qquad$
$\qquad$

Answer $\qquad$
11.

Nov/2019/Paper_3F/No. 6
George buys some food for $£ 16.55$
He pays the exact amount with two notes and four coins.
List the notes and coins.
[2 marks]
$\qquad$
$\qquad$
$\qquad$

Notes $\qquad$
$\qquad$

Coins
12. Nov/2019/Paper_3F/No. 13

The cost of 5 kg of potatoes is $£ 3.20$
The cost of $\frac{1}{2} \mathrm{~kg}$ of carrots is 29 p
Work out the total cost of 12 kg of potatoes and $1 \frac{1}{2} \mathrm{~kg}$ of carrots.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer £
13. Nov/2019/Paper_3H/No. 15

When you earn money you pay income tax.
The amount you pay depends on how much you earn that year.
You pay
$0 \%$
on the first $£ 12500$ you earn
$20 \%$ on the next $£ 37500$ you earn.

One year, Kim paid $£ 9260$ income tax.
Work out how much she earned that year.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer £

