## AQA - Fractions, decimals and percentages - GCSE Mathematics Paper-2

1. May/2020/Paper_2F/No. 9

Members of a club are Senior, Adult or Junior.
(a) Here is a report about the members of the club.
$18 \%$ are Senior
$54 \%$ are Adult
$38 \%$ are Junior

Give a reason why there must be a mistake in the report.
$\qquad$
$\qquad$
(b) An Adult membership fee is $£ 120$

A Junior membership fee is $\frac{1}{5}$ of the Adult fee.
Work out the total membership fee for 2 Adults and 3 Juniors.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer £ $\qquad$
2. May/2020/Paper_2H/No. 14

A marathon takes place each year.
In 2020 there were 6500 runners.

## Prediction

For each of the next 3 years the number of runners will increase by $5 \%$

Does this predict that in 2023 there will be more than 7500 runners?
You must show your working.
[3 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
3. May/2020/Paper_2H/No. 16

## On a restaurant menu there are

22 main dishes, of which $\frac{4}{11}$ are gluten-free
7 rice dishes, which are all gluten-free
5 naan breads, of which $40 \%$ are gluten-free.
This Meal Deal is on the menu.

Choose one main dish, one rice dish and one naan bread

How many of the possible Meal Deals are totally gluten-free?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer $\qquad$
4. June/2019/Paper_2F/No. 2

Circle the fraction which is equal to 0.25

$$
\begin{array}{llll}
\frac{1}{40} & \frac{2}{5} & \frac{3}{12} & \frac{4}{100}
\end{array}
$$

5. June/2019/Paper_2F/No. 3

Here is a number line.


Which number is at A ?
Circle your answer.
3.3
3.55
3.6
3.8
6. June/2019/Paper_2F/No. 23

In a sport, injury time is added time played at the end of a match.
The table shows the injury time, $t$ (minutes) played in 380 matches.

| Injury time, $t$ (minutes) | Frequency |
| :---: | :---: |
| $0<t \leqslant 2$ | 59 |
| $2<t \leqslant 4$ | 158 |
| $4<t \leqslant 6$ | 106 |
| $6<t \leqslant 8$ | 45 |
| $8<t \leqslant 10$ | 12 |

(a) Circle the two words that describe the data.
continuous discrete grouped ungrouped
(b) Which class interval contains the median?

You must show your working.
$\qquad$
$\qquad$
$\qquad$

Answer $\qquad$ $<t \leqslant$ $\qquad$
(c) What percentage of the matches had more than 6 minutes of injury time?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer \%
7. June/2019/Paper_2F/No. 26

Circle the reciprocal of 4
[1 mark]
-4
2
0.4
0.25
8. Nov/2019/Paper_2F/No. 6

A shop has this offer.
$£ 5$ reduction if you spend more than $£ 100$ or
$£ 10$ reduction if you spend more than $£ 150$ or
$£ 20$ reduction if you spend more than $£ 200$

At the shop, dresses cost $£ 42$ each.
Amira buys 3 dresses.
Bobbi buys 5 dresses.
How much more than Amira does Bobbi pay?
[3 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer £
9. Nov/2019/Paper_2F/No. 9

What percentage of this shape is shaded?


Answer \%
10. Nov/2019/Paper_2F/No. 15

The value of a house is $£ 120000$
The value is expected to increase by $5 \%$ each year.
Work out the expected value after 4 years.
Give your answer to 2 significant figures.
You must show your working.
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer £
11. Nov/2019/Paper_2H/No. 3

Circle the number half way between $\frac{7}{12}$ and $\frac{3}{4}$
$\frac{7}{32}$
$\frac{5}{8}$
$\frac{2}{3}$
$\frac{1}{2}$
12. Nov/2019/Paper_2H/No. 11

The value of a house is $£ 120000$
The value is expected to increase by $5 \%$ each year.
Work out the expected value after 4 years.
Give your answer to 2 significant figures.
You must show your working.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer £

