## AQA - Probability - GCSE Mathematics Probability-2

1. May/2020/Paper_2H/No. 27

These 20 discs are in a bag.



33


Two of the discs are taken at random from the bag.
Work out the probability that the first disc has a smaller number than the second disc.
[4 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer
2. June/2019/Paper_2F/No.4(b)
(b) One of the passengers is chosen at random.

Write down the probability that the passenger is in Business Class.
$\qquad$
$\qquad$

Answer
3. June/2019/Paper_2H/No. 12

A biased coin is thrown 250 times.
The relative frequency of Heads is worked out after every 50 throws.

| Total number of throws | 50 | 100 | 150 | 200 | 250 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Relative frequency | 0.4 | 0.29 | 0.4 | 0.32 | 0.3 |

Circle the best estimate of the probability of Heads.
[1 mark]
0.3
0.32
0.342
0.4
4. Nov/2019/Paper_2F/No. 12

When a spinner is spun, it shows
Blue (B) or Green (G) or Red (R) or White (W).
When a coin is tossed, it shows

$$
\text { Heads }(H) \text { or Tails }(T) \text {. }
$$

The spinner is spun and the coin is tossed.
Complete this list of possible outcomes.

## B H

5. Nov/2019/Paper_2F/No. 23

The result of a game is Win, Lose or Draw.
After 80 games
relative frequency of the result W in is 0.4
relative frequency of the result Lose is 0.25
How many of the games had the result Draw?
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer
6. Nov/2019/Paper_2H/No. 17

A packet contains 80 sweets.
The flavour of each sweet is lemon, orange or apple.
A sweet is taken at random.
(a) P (lemon or orange) $\leqslant 0.85$

Work out the minimum possible number of apple sweets in the packet.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer $\qquad$
(b) $\quad \mathrm{P}$ (lemon or apple) $<0.71$

There are 31 lemon sweets.
Work out the maximum possible number of apple sweets in the packet.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer $\qquad$

