Question 1

A six sided die is rolled once.
What is the probability that the number rolled is an even number greater than 2?

Question 2

If the radius of a cylindrical container is doubled, how do you change the height of the container so that the volume will stay the same?

Question 3

Mani competed in the hop, step and jump at the athletics sports.
Her jump was 2.65 metres and her step was 1.96 metres.
The total of her triple jump was 5.5 metres.
How long was her hop?

Question 4

What is the sum of the prime numbers between 1 and 22?

Question 5

Susan has four rectangular blocks.
Their sizes in centimetres are 5 × 6, 9 × 2, 2 × 6, and 7 × 3.
She plays with them until they all fit together and form a square.
What is the total perimeter length of the square?

Question 6

Matilda works at Burger King. She has saved $1400 for an overseas trip but her rent
has gone up. She now has to pay $20 per month from her savings.
Stacey is also planning on going for an overseas trip. She has only $200 saved but is
able able to save an extra $10 per month.
After how many months will both girls have the same amount of savings?

Question 7

Pushpa and Mannish are playing Pokemon Go.
Mannish has 279 Pokemon and asks Pushpa how many she has.
Pushpa says if one quarter, one fifth and one sixth of my Pokemon were added together,
that would make 185 Pokemon.
How many Pokemon does Pushpa have?

Question 8

Four friends, all with their drivers licenses, get in a four seater mini to go on a holiday.
How many different ways can they allocate the seats to sit in?

Question 9

What is the largest prime factor of 333?

Question 10

Darren is buying KFC for his class. He buys quarter packs which come in a box
measuring 20 × 20 × 20 cm.
How many quarter packs can Darren fit in a box measuring 600 × 600 × 600 mm?

Question 11

The sum of all the natural numbers from 1 to 2000 is?

Question 12

If $P = 10 + 10^2 + 10^3 + 10^4 + 10^5$, then the sum of P's digits is?

Question 13

Matthew buys 2 hot dogs and 3 chips for $6.30. Mathilda pays $6.20 for 3 hot dogs and 2 chips.
How much would it cost to buy 5 hot dogs and 5 chips?

Question 14

The average of two integers is -2.
The sum of these two integers and the number -5 is?

Question 15

There are 20 people performing a play.
Five have blond hair, 12 have blue eyes and 4 of them have both blond hair and blue eyes.
How many actors have neither blue eyes nor blond hair?

Question 16

What is the next number in this sequence?

3, 5, 9, 17, 33, ___

Question 17

1/2 + 0.25 + 1/4 + 0.52 = ?

Question 18

A right angled isosceles triangle with a hypotenuse of 8 cm is drawn inside a circle.
What is the radius of the smallest circle that the triangle fits in?

Question 19

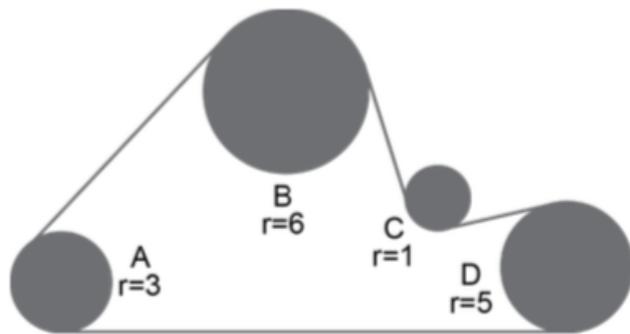What is the value of $3 + 5 \times 2 - 1 \times 0$?

Question 20

What is the value of N in the equation below?

$9 \times 8 \times 7 \times 6 = 18 \times N \times 8 \times 21$.

Question 21

Four wheels are connected by a belt.
The radius of each wheel is given.
If wheel B turns 20 revolutions per minute, how many revolutions does wheel D do in 1 minute?

Question 22

The Hurricanes have won five games in row with the following scores.
29-12, 17-15, 45-5, 32-15, 51-32.
How many points must they score in their next game to keep their average above 30 points per game?

Question 23

What is the angle of the smaller angle formed by the hands of a clock at 8 o'clock?

Question 24

A rectangular garden 50 metres long and 10 metres wide is enclosed by a fence.
Jane wants to make the garden larger but can not afford any new fencing.
She builds a square garden.
How much larger is the new garden than the old one?

Question 25

Bo, Co, Flo, Jo and Mo have different amounts of money.
Neither Jo nor Bo has as much money as Flo.
Both Bo and Co have more than Mo.
Jo has more than Mo, but less than Bo.
Who has the least amount of money?

Question 26

The third exit on a highway is located at milepost 40 and the tenth is at milepost 160.
There is a service station on the highway located three quarters of the way from the third exit to the tenth exit.
At what milepost would you expect to find this service station?