

Question 1

If a 90 cm piece of string was cut into 4 pieces of 15 cm, what was the remaining length?

- A. 40 cm B. 30 cm C. 20 cm D. 25 cm E. 60 cm

Question 2

If $a \diamond b$ means $a + 2 \times b$, $3 \diamond 2 =$

- A. 5 B. 6 C. 7 D. 8 E. 12

Question 3

A stack of 10 dice is made. Each dice is $2\text{cm} \times 2\text{cm} \times 2\text{cm}$. Assuming there are no hidden gaps, what is the volume of the tower?

- A. 40 cm^3 B. 80 cm^3 C. 160 cm^3 D. 200 cm^3 E. 600 cm^3

Question 4

Which is the odd one out?

- A. Foot B. Mile C. Millimetre D. Inch E. Yard

Question 5

Two six sided regular dice, one red and one green are tossed. How many ways can the sum of the two dice equal 9?

- A. 1 B. 2 C. 3 D. 4 E. 5

Question 6

Dr Ekans Repus has made a mysterious glowing red substance that increases its size by 100% every minute. At 10:00am he releases a small quantity of it into a castle next door to his laboratory and by 6:00pm it has filled the castle. At what time does the substance fill $\frac{1}{16}$ of the castle?

- A. 5:56pm B. 5:44pm C. 10:30am D. 10:00am E. 6:00pm

Question 7

When Madeline went to the market on Monday she bought a carrot and a cabbage for her rabbits, Bubble and Squeak. It takes her rabbits 45 minutes to eat a whole cabbage, but Madeline only lets them eat for five minutes a day. What day would they be finished with the cabbage if they don't eat anything on the weekends and she started feeding the rabbits on Monday?

- A. Friday B. Thursday C. Tuesday D. Wednesday E. Saturday

Question 8

How many positive integer factors does 28 have?

- A. 3 B. 4 C. 5 D. 6 E. 14

Question 9

If Lucy had a bag of sweets and she gave half to her friends, and she gave a third of the remaining to her teacher and she still had 12 sweets for herself. How many did she have originally?

- A. 24 B. 30 C. 36 D. 72 E. 108

Question 10

What is the next number in this pattern?

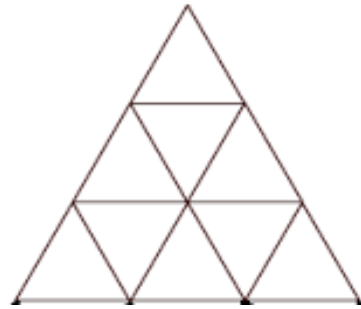
3, 4, 7, 11, 18, ___

- A. 21 B. 24 C. 27 D. 29 E. 36

Question 11

How many triangles of any size are in this shape?

- A. 8 B. 8 C. 11 D. 13 E. 15



Question 12

Which of these numbers is twice the sum of its digits?

- A. 14 B. 28 C. 12 D. 18 E. 16

Question 13

$$7 - 4 + 3 \times 0 + 1 =$$

- A. 0 B. 4 C. 7 D. 1 E. 10

Question 14

Amber was the oldest person in the world. If she died at the age of 135 years old on December 31st, 1956, what year was she born?

- A. 1821 B. 1820 C. 1921 D. 1920 E. 1822

Question 15

If the sum of three consecutive numbers equals 48, what is the highest of the three numbers?

- A. 18 B. 19 C. 17 D. 14 E. 8

Question 16

Jaycar has a sale of 20% on all their electronics except solar panels. Caroline wants to purchase a drone for \$500, and finds that she could buy 1 solar panel for the same price. How much more expensive is the drone at its normal price than the solar panel?

- A. \$125 B. \$135 C. \$155 D. \$205 E. \$100.

Question 17

If Finn eats $\frac{1}{3}$ of his lunch, gives his pet rat $\frac{1}{2}$ of the rest and drops half of the remaining food, what fraction is left?

- A. $\frac{1}{3}$ B. $\frac{1}{8}$ C. $\frac{1}{2}$ D. $\frac{1}{6}$ E. $\frac{1}{12}$

Question 18

Thomas's weight is x and Max's weight is y . We know that $x = 4y$ and $40 = 0.5x$. How heavy is Max? ($4y$ means 4 times y , $0.5x$ means 0.5 times x)

- A. 5 B. 10 C. 20 D. 25 E. 40

Question 19

If $a = 4$, $b = 6$ and $c = 9$, $a \times b - c \times b =$

- A. 0 B. -30 C. 162 D. 240 E. -72

Question 20

I am n years old. My dad is 45 years old and my mum is x years old. My mum's age is $\frac{4}{5}$ of my dad's. In 4 years I will be $\frac{1}{4}$ of my mum's age. How old am I?

- A. 5 B. 6 C. 7 D. 8 E. 9

Question 21

A book has two covers each 2mm thick and 400 leaves each 0.06mm thick. The total thickness of the book is:

- A. 24 mm B. 26 mm C. 24.04 mm D. 28 mm E. 244 mm

Question 22

Adam plays football. He has 2 hours of training every weekday and 3 hours of training on Sunday. He does extra training on Monday and Friday that runs from 6:30pm-7:45pm. He also plays a 90 minute football game on Saturday. How many hours does he train/play football every week?

- A. 17 hours B. 18 hours C. 19 hours D. 20 hours E. 21 hours

Question 23

28 people are attending a meeting. Each person shakes everyone else's hand, but only once. They do not shake their own hand. How many handshakes are made?

- A. 358 B. 368 C. 378 D. 388 E. 27

Question 24

Sally is thinking of a number. She adds 2 to the number, multiplies it by 3, and divides it by a fourth of the original number. She gets fifteen. What was the original number?

- A. 7 B. 8 C. 9 D. 10 E. 15

Question 25

A shape has seven sides of equal length. What is its name?

- A. Square B. Cube C. Hexagon D. Heptagon E. Nonagon

Question 26

A bus is travelling around the city. At the first stop 5 people get off and 3 people get on. At the second stop 2 people get off and 6 people get on. There are now 16 people on the bus. How many people were on the bus to begin with?

- A. 12 B. 14 C. 16 D. 18 E. 22

Question 27

Julie is preparing a speech for her class. Her speech must be between one half hour and three-quarters of an hour in length. The ideal rate of speech is 150 words per minute. If Julie speaks at the ideal rate, which of the following number of words would be an appropriate length for her speech?

- A. 2250 B. 3000 C. 4200 D. 4350 E. 5650

Question 28

Zöe has \$10 to spend at the dairy. She wants to buy as many lollipops as she can, each one costing 24 cents. If she buys as many as she can, how much money will be left over?

- A. 10 cents B. 16 cents C. 20 cents D. 26 cents E. \$9.76

Question 29

A class of 20 students averaged 66% in an examination, while another class of 30 students averaged 56%.

What was the overall average for the two classes?

- A. 56% B. 60% C. 61% D. 66% E. 122%

Question 30

If Willow, Jerry, Oscar, Sabina, Ava and Harriet went to the movie theatre to see 'Ice Age 5' and it started at 6:44 pm and ended at 8:06 pm, how long was the whole film if there is a 10 minute break in the middle?

- A. 2 hr 22 min B. 2 hr 12 min C. 1 hr 12 min D. 1 hr 22 min E. 1 hr 62 min