

Q1.

Average of numbers is given by

$$= \frac{0.44 + 0 + 46 + 8.03 + \frac{1}{5}}{5} = \frac{54.67}{5} = 10.934$$

Hence Option C

Q2.

$$0.04 = \frac{4}{100} = \frac{1}{25}$$

Hence Option A

Q3

$$140\% = 140 * \frac{1}{100} = \frac{14}{10} = \frac{7}{5}$$

Hence Option A

Q4

Nearest tenth place means 1 decimal place

$$618.988$$

To check what should be on 1st decimal place, we check 2nd decimal place which is '8' in our case, which is greater than 5, hence we increase 1st decimal place by 1 unit., so we get

$$618.988 = 619.0$$

Hence Option C

Q5

$$\text{Sixteen hundredth} = \frac{16}{100}$$

$$\text{Two tenth} = \frac{2}{10}$$

We want to subtract sixteen hundredth from two tenths

$$\frac{2}{10} - \frac{16}{100} = \frac{20}{100} - \frac{16}{100} \rightarrow \frac{4}{100} = 0.04$$

Hence option D

Q6

$$7 * 4.98 - 2.98 + 8$$

We need to apply order of operation BODMAS, by which we should multiply first

$$\rightarrow (7 * 4.98) - 2.98 + 8 = 34.86 - 2.98 + 8 = 39.88$$

Hence Option A

Q7

Divide 4.921 by 0.7

$$= \frac{4.921}{0.7} = \frac{4921}{7} * \frac{10}{1000} = 703 * \frac{1}{100} = 7.03$$

Hence Option C

Q8

We are given $\frac{2}{5}$, 0.5, 0.070, 3.7, 2.03 and we have to write the numbers in decreasing order

$$\frac{2}{5} = 0.4$$

So we have to write

$$3.7 > 2.03 > 0.5 > \frac{2}{5} > 0.070$$

Hence option D

Q9

$$\begin{aligned} 3\frac{24}{25} + \left(\frac{4}{5}\right)^2 &= \frac{(25 * 3) + 24}{25} + \frac{16}{25} = \frac{75 + 24}{25} + \frac{16}{25} \\ &= \frac{99}{25} + \frac{16}{25} = \frac{115}{25} = \frac{23}{5} = 4\frac{3}{5} \end{aligned}$$

Hence Option A

Q10

$$\frac{1}{5} = 0.2$$

$$1\frac{3}{5} = \frac{(5 * 1) + 3}{5} = \frac{5 + 3}{5} = \frac{8}{5} = 1.6$$

Plotting on number line, each strand represents increment of 0.2,

Hence Option B

Q11

$$\begin{aligned} 5\frac{1}{21} \div 3\frac{1}{7} &\rightarrow \frac{(21 * 5) + 1}{21} \div \frac{(3 * 7) + 1}{7} \\ &\rightarrow \frac{105 + 1}{21} \div \frac{21 + 1}{7} \rightarrow \frac{106}{21} \div \frac{22}{7} \\ \frac{\frac{106}{21}}{\frac{22}{7}} &= \frac{106 * 7}{21 * 22} = \frac{742}{462} = \frac{53}{33} \rightarrow 1\frac{20}{33} \end{aligned}$$

Hence Option D

Q12

Mrs. MacDonal need 22 pound of hamburger meat and she already has $11\frac{4}{7}$ with her , she will need

$$\begin{aligned} 22 - 11\frac{4}{7} &= 22 - \frac{(11 * 7) + 4}{7} = 22 - \frac{77 + 4}{7} = 22 - \frac{81}{7} \\ &\rightarrow \frac{(22 * 7) - 81}{7} = \frac{154 - 81}{7} = \frac{73}{7} = 10\frac{3}{7} \end{aligned}$$

Hence Option D

Q13.

A stripe of steel weights $4\frac{2}{5}$ pounds.

Bundle weighs 88 pounds.

No. of stripes

$$\frac{88}{4\frac{2}{5}} = \frac{88}{\frac{(5 * 4) + 2}{5}} = \frac{88}{\frac{22}{5}} = \frac{88 * 5}{22} = 4 * 5 = 20$$

Hence Option B

Q14.

Total inheritance \$40,000

Your share $\frac{3}{4}$

$$= \frac{3}{4} * 40000 = 3 * 10000 = 30000$$

Hence Option B

Q15

$$\frac{9}{z} = \frac{6}{4} \rightarrow 9 * 4 = z * 6$$
$$z = \frac{9 * 4}{6} = \frac{36}{6} = 6 \rightarrow z = 6$$

Hence Option A

Q16

What percent of 60 is 36

$$= \frac{36}{60} * 100\% = 60\%$$

Hence Option B

Q17

Find 21% of 35

$$21\% \text{ of } 35 = \frac{21}{100} * 35 = \frac{147}{20} = 7.35$$

Hence Option B

Q18

12% of what number is 36

Let that number be x

$$12\% \text{ of } x = 36$$
$$\frac{12}{100} * x = 36 \rightarrow x = \frac{36 * 100}{12} = 3 * 100 = 300$$

Hence Option A

Q19

Scientific notation of 27000

Move the decimal point 4 places to the left.

$$2.7 * 10^4$$

Hence Option B

Q20

$$(2.2 * 10^{12})(2 * 10^{-10}) = (2.2 * 2)(10^{12} * 10^{-10})$$
$$= 4.4 * 10^{12-10} = 4.4 * 10^2$$

Hence Option A

Q21

Bag of cement = 40 pounds

Cement = 10 pounds

Gravel = 5 pounds

Rest is sand $\rightarrow 40 - 10 - 5 = 25$ pounds

Gavel to sand ratio is $5 : 25 \rightarrow 1 : 5$

Hence Option C

Q22

1 tablets contain 2.5 grams

14 tablets will contain

$\rightarrow = 14 * 2.5 = 35$ Milligrams

Hence Option B

Q23

30 gallon gas travels 540 miles

60 gallons gas will travel $= 2 * 540 = 1080$ miles

Hence Option D

Q24

Original price \$134

Price of calculator reduced by 17% $\rightarrow 17\% \text{ of } 134 = \frac{17}{100} * 134 = 0.17 * 134 = \22.78

New selling price would be $\$134 - \$22.78 = \$111.22$

Hence Option D.

Q25

1 lbs = 16 oz.

$$\begin{array}{r} 7 \text{ lbs. } 11 \text{ oz.} \\ + \quad 6 \text{ lbs. } 10 \text{ oz.} \\ \hline 13 \text{ lbs } 21 \text{ oz.} \\ = \quad 13 \text{ lbs. } (16+5) \text{ oz.} \\ = \quad 14 \text{ lbs. } 5 \text{ oz.} \end{array}$$

Hence Option B