

Question 1 Percentage

$\frac{1}{8}$ is decrease by 25%

Solution

$$\frac{1}{8} - \frac{25}{100}$$

$$= \frac{25 \times 8}{100 \times 1}$$

$$= \frac{25 \times 1}{100 \times 8}$$

$$= \frac{25}{400}$$

$$= \frac{1}{16}$$

Cross multiplication

$\frac{1}{8}$ is decrease by 25%

$$= \frac{1}{8} - \frac{1}{32}$$

$$\frac{4-1}{32} = \frac{3}{32} = 0.09375$$

Question No 2

When 60 is subtracted from 80% of a number, the resulting no is 60. What is the number?

Solution

$$60 = \frac{80}{100}(x) - 60$$

$$60 - \frac{69(x)}{100} = 60$$

$$\frac{60 - 6x}{10} = 60$$

$$\frac{6x}{10} = 60 + 60$$

$$\frac{6x}{10} = 120$$

$$x = \frac{10}{6} \times 120$$

$$x = 200$$

The resultant number of 60 is 200.

Question 4

A candidate who gets 30% of total votes polled is defeated by 15000 votes. Find the number of votes of winning candidates.

Solution

$$\text{Total vote} = x$$

$$\text{Defeated by} = 15000$$

$$\text{Candidates gets vote} = 30\%$$

$$\frac{3x}{10x}$$

$$= \frac{3x}{10}$$

winning candidate vote

$$x = \frac{3}{10} (x)$$

$$= \frac{10x - 3x}{10}$$

$$= \frac{7x}{10}$$

$$\frac{7x}{10} - \frac{3x}{10} = 15000$$

$$= \frac{7x - 3x}{10} = 15000$$

$$= \frac{4x}{10} = 15000$$

$$4x = 15000 \times \frac{10}{4}$$

$$4x = 150000$$

$$x = 37500$$

Total vote

$$\text{No of winning candidate} = \frac{7}{10} (37500)$$

$$\text{No of winning candidate vote} \\ = 26250$$

Q.

in a college examination 52% of the candidates failed in math and 42% failed in english, if 17% failed in both the subjects then the percentage of the candidates who pass in both subject is?

Solution

The candidate Pass in math = 52%

English = 42%

Failed in Both = 17%

Candidates Who Pass in both = ?

The candidates Failed in English and math

$$= (52\% + 42\%) = 94\%$$

Candidates Failed in Both = (94% - 17%)

$$\text{Failed in both} = 77\%$$

Percentage of Passing = (100 - 77)

23%

Nadeem spends 30% of his income of food articles, 40% of the remaining on conveyance and clothes and saved 50% of the remaining of his salary is 18400 Rs. how much money he saves every month

Solution

$$\text{Exp} = \frac{30}{100} \times (18400)$$

$$\boxed{5520} \quad \text{--- (i)}$$

Remain $18400 - 5520 = 12880$
 Conveyance and cloth = $\frac{40}{100} (12880)$

$$\text{Expenditure on cloth} = \boxed{5152} \quad \text{--- (ii)}$$

Remain $= 12880 - 5152$

$$\text{Remain} = \boxed{7728}$$

$$\text{Saving is} = \frac{50}{100} \times (7728)$$

$$\boxed{3864} \quad \text{Saving money}$$

$$\begin{array}{r} 7728 \\ 10 \overline{) 7728} \\ \underline{70} \\ 72 \\ \underline{70} \\ 20 \\ \underline{20} \\ 0 \\ \hline 7728 \\ \hline 3864.0 \end{array}$$

A man buy 5kg of meat at 5000/- in addition for every kilogram of purchase he has to pay a consumption tax of 6% on the selling price. Calculate the total amount of money that he has to pay.

$$\text{man buy chicken} = 5 \times 5000 = 25000.$$

$$25000 + \frac{6}{100} (25000)$$

$$25000 + 1500 = \boxed{26500}$$

when 40% of a number is added to 42 the result is the number itself. Find the number.

Solution

$$\frac{40}{100} (x) = 42 - x$$

$$\frac{4x}{100} = 42 - x$$

$$\frac{2x}{5} = 42 - x$$

$$2x \times x = 42$$

5

$$\frac{3x}{5} = 42$$

$$x = 42 \times \frac{5}{3}$$

$$x = 70$$

Q.

A metal bar weight 8.15 ounces
93% of the bar is silver. how
many silver in the bar

Solution

metal bar weigh = 8.15 ounces

The silver bar = 93%

how many bar silver is?

$$\text{Silver} = \frac{93}{100} (8.150)$$

$$= 0.93 \times 8.150$$

$$= 7.57$$

The number of bar is 757

15 liter mixture contains alcohol and the rest is water. If 3 liters of water be mixed in it, what is the percentage of alcohol in the new mixture?

Solution

Mixture = 15 liter

alcohol = 20%

if more add = 3 liter

Percentage of alcohol.

Added the 3 liter in mixture

$$\text{total} = 15 + 3 = 18$$

$$\text{Percentage of alcohol} = \frac{3}{100} \times 100$$

$$15 \times \frac{20}{100} = 3 \text{ liter}$$

$$3 + 15 = 18$$

$$\frac{3}{18} \times 100$$

if 15 litres mixture contain 20% alcohol and the rest is water. if the 3 litres water mixed in it what is the percentage of alcohol in the new mixture?

Solution

15 litres mixture contain = 20%
and rest water.

if 3 litres water is mixed in it.
what is the percentage of alcohol?

$$\text{water} = \frac{15 \times 20}{100} = 0.2 \times 15$$

3 litres

if 3 litres water is mixed = $15 + 3 = 18$

$$\text{Percentage of alcohol} = \frac{3}{100} \times 18$$

$$= 3 \times 1800$$

$$= \boxed{1.666}$$

The amount of alcohol in 3 litres is 1.666

Questions

A student earned a grade of 80% in math had 20 problems. How many problems in that test did the answer correctly?

Date

Students earned = 80%
in math = 20

How many answers correct?

Formula

$$\text{Percent} = \frac{\text{score}}{\text{Total}}$$

$$= \frac{80}{100} (20)$$

$$= 16$$

16% answers are correct

1 kg of tea and 4 kg sugar
Price Rs 35. but if sugar
rise 50% and tea 10%. They
would be Rs 42.50. Find the
Price of per kg of sugar.

Solution

1 kg tea and 4 kg sugar = 35
 if it rise 50% and 10% = 42.50
 price per kg = ?

Solution

$$1x + 4y = 35 \quad \text{--- (1)}$$

$$\left(x + \frac{50}{100} \times 1x\right) \left(4y + \frac{50}{100} \times 4y\right) = 42.50$$

$$\left(x + \frac{1x}{2}\right) \left(4y + \frac{2y}{1}\right) = 42.50$$

$$\left(x + \frac{1}{2}x\right) \left(4y + 2y\right) = 42.50$$

$$\left(\frac{3x}{2}\right) \left(\frac{6y}{1}\right) = 42.50$$

$$\left(\frac{11x}{2}\right) \left(\frac{6y}{1}\right) = 42.50$$

$$\frac{11x + 60y}{2} = 42.50$$

$$11x + 60y = 42.50 \times 2$$

$$11x + 60y = 85 \quad \text{--- (2)}$$

price of 1 kg sugar = $y = ?$

$$x + 4y = 35$$

$$x = 4y - 35$$

$$\begin{aligned}
 n &= 4 - 35 \\
 11n + 60y &= 4250 \quad \text{--- (ii)} \\
 11(35 - 4y) - 60y &= 425 \\
 +385 - 44y - 60y &= 425 \\
 -385 + 44y - 60y &= 425 \\
 +385 + 16y &= 425 \\
 +16y &= 425 + 385 \\
 16y &= 810
 \end{aligned}$$

$$\frac{16y}{16} = \frac{810}{16}$$

$$y = 2.5$$

The increase price is 2.5

Logical Reasoning

AZ, CX, FU, JQ

AZ, CX, FU, JQ

in this series first two step forward then 3 step forward or four step forward in second step 2 step backward 3 step back four step back used are

DIKJ, FJW, HIU, JHS, 2, 7

DIKJ, FJW, HIU, JHS, LGR

in this series first step 2 step forward
one step back and 2 step
backward.

Ques 1

if the friend is coded H U M J T K
how candle is written.

Candle = E D R I R L

This series is 2 step forward for
first letter 3 step forward to second
letter. Four step forward to third
letter. Five step forward to fourth
letter and six step forward to
sixth letter.

Question 2

if Brother is written as
Q D G S N Q A. Then same
language system as —?

Brother = CPDGBNQA

SISTER = ANKSKAD

it 12 step Forward then 12
step Backward 9 step back
ward and 1 step backward 10
step forward and 11 step
Forward.

Q.

LANDMINE is written as
PYRBCGRG how HOME
written in same style.

LANDMINE = PYRBCGRG

Homemade = LMCQCCYAC

in this series First 4 step
Forward then 24 step Forward
4 step Forward 2 step Back
ward. Five step Forward. Two
step backward. Then Four step
Forward and Two-step Back-ward