



Freedom Valley School, Bardoli
Academic Year 2023-24

Class: 7th Sub: Maths

C.W./H.W./P.W. W.S. No. 6

Student's Name:

Roll No.:.....

Issue Date: 06/11/2023 **Sub. Date:** 28/11/2023

Sub. Teacher Sign

Principal's Sign

DIWALI VACATION HOMEWORK

Q-1) Find whether there is a profit or loss in each of the following. Also calculate how much profit or loss

(a) CP=₹560 and SP=₹780

(b) CP=₹120 and SP=₹280

(c) CP=₹180 and SP=₹100

(d) CP=₹450 and SP=₹570

(e) CP=₹670 and SP=₹560

Q-2) Convert each part of the ratio to percentage

(a) 2:3

(b) 1:4

(d) 3:3:4

(e) 2:8

(f) 2:1:5

Q-3) The population of a city decreased from 30000 to 29000. Find the percentage decrease

Q-4) Mohan bought a table for ₹14500 and spent ₹500 on transportation. He sold it for ₹18000, then find the profit percentage.

Q-5) On selling a toy for ₹630, a salesman loses 10%. Find the cost price of the toy

Q-6) Find the Simple interest for each of the following

(a) P=₹4500, R=5%, T=2 years

(b) P=₹670, R=10%, T=5 years

(c) P=₹180, R=7%, T=10 years

(d) P=₹150, R=5%, T=4 years

(e) P=₹560, R=2%, T=4 years

Q-7) Find the amount to be paid at the end of 5 years in each case:

(a) P=₹2400 at 12% per annum

(b) P=₹8000 at 5 % p.a.

Q-8) A shopkeeper bought a chair for ₹300 and sold it for ₹275. Find the loss percentage

Q-9) Cost of an item is ₹150. If it is sold with a profit of 15%. Find the selling price

Q-10) An item is sold for ₹550 at a loss of 10%. Find its cost price

Q-11) Shyam invested ₹200000 at 5% interest per annum for 4 years. Find the simple interest

Q-12) Find the interest on ₹500 for a period of 4 years at the rate of 8% per annum. Also, find the amount to be paid at the end of the period

Q-13) A man borrowed Rs 8000 from a bank at 8% per annum. Find the amount he has to pay after $4\frac{1}{2}$ years.

Q-14) Anita deposits Rs 1000 in a savings bank account. The bank pays interest at the rate of 5% per annum. What amount can Anita get after one year?

Q-15) Find rate of interest if P=₹150, SI=₹30 and T=4 years

Q-16) Find principal if rate of interest is 8%, time is $\frac{7}{2}$ years and simple interest is ₹98

Q-17) Write five positive rational numbers and five negative rational numbers

Q-18) Reduce to standard form

(i) $\frac{-28}{49}$ (ii) $\frac{-90}{60}$ (iii) $\frac{72}{48}$ (iv) $\frac{6}{30}$ (v) $\frac{24}{36}$

Q-19) Write following rational numbers on a number line

(i) $\frac{1}{2}$ (ii) $\frac{1}{5}$ (iii) $\frac{2}{3}$ (iv) $\frac{5}{7}$ (v) $\frac{-2}{5}$

Q-20) Find five rational numbers between the following rational numbers

(i) $\frac{5}{7}$ and $\frac{2}{5}$ (ii) $\frac{-7}{4}$ and $\frac{-5}{7}$ (iii) $\frac{2}{3}$ and $\frac{6}{8}$ (iv) $\frac{6}{7}$ and $\frac{-1}{5}$ (v) 2 and 5

Q-21) List 10 rational numbers between 5 and 6

Q-22) Write five more rational numbers in each of the following patterns

(a) $\frac{1}{5}, \frac{2}{10}, \frac{3}{15}, \frac{4}{20}, \dots$ (b) $\frac{-2}{7}, \frac{-4}{14}, \frac{-6}{21}, \frac{-8}{28}, \dots$

Q-23) Write in ascending order

(a) $\frac{7}{9}, \frac{3}{15}, \frac{4}{5}, \frac{2}{45}$ (b) $\frac{11}{12}, \frac{5}{8}, \frac{3}{4}$ (c) $\frac{5}{12}, \frac{7}{18}, \frac{3}{7}, \frac{11}{24}$ (d) $\frac{5}{14}, \frac{11}{21}, \frac{9}{35}, \frac{3}{7}$ (e) $\frac{3}{4}, \frac{3}{2}, \frac{2}{3}, \frac{1}{12}$

(24-Q) Write in descending order

(a) $\frac{1}{5}, \frac{2}{7}, \frac{15}{20}, \frac{7}{10}$ (b) $\frac{2}{5}, \frac{4}{6}, \frac{3}{5}, \frac{1}{3}$ (c) $\frac{2}{3}, \frac{3}{5}, \frac{7}{10}, \frac{5}{40}$ (d) $\frac{7}{12}, \frac{3}{4}, \frac{8}{13}, \frac{2}{3}$ (e) $\frac{2}{4}, \frac{1}{6}, \frac{3}{7}, \frac{4}{9}$

Q-25) Represent following rational numbers on a number line

(a) $\frac{2}{5}$ (b) $\frac{3}{7}$ (c) $\frac{2}{3}$ (d) $\frac{1}{2}$ (e) $\frac{3}{2}$

~~~~~**HAPPY DIWALI**~~~~~