Solution - 01 :-

(i) It is given that,

Principal (p) = Rs 2000.

Rate of interest (R) = 5% percent per annum

Time = 5years.

I = simple interest = ?

$I = \dfrac{PRT}{100} = \dfrac{2000 \times 5\% \times 5\,years}{100}$

$= \dfrac{50000}{100}$ = Rs. 500

simple interest is Rs. 500.

(ii) It is given that.

Principal (P) = Rs. 500.

Rate of interest = 12.5% per anum.

Time = 4 years. I = ?

$J = \dfrac{PRT}{100} = \dfrac{500 \times 12.5 \times 4}{100} = \dfrac{500 \times 50}{100}$ = Rs. 250.

simple interest = Rs. 250.

(iii) It is given that,

Principal (P) = Rs 4500. Rate of interest = 4% per annum

Time = 6 months.

Time = $\dfrac{6}{12}$ years = $\dfrac{1}{2}$ years   [∵ 1year = 12 months]

$I = \dfrac{PRT}{100} = \dfrac{4500 \times \frac{1}{2} \times 4}{100}$ = Rs. 90.   ∴ I = 90.

(iv) principal = Rs.12000

Rate of interest = 18% per annum.

Time = 4 months = $\frac{4}{12}$ year. [∵ 1 year = 12 months]

We know that,

$$I = \frac{PRT}{100} = \frac{12,000 \times 18 \times 4/12}{100}$$

$$I = \frac{120 \times \cancel{12}^{6}}{\cancel{12}}$$

$$I = Rs.720.$$

(v) principal = Rs 1000.

Rate of interest = 10% per annum

and Time = 73 days.

we know That. $\begin{bmatrix} 1 \text{ year} = 365 \text{ days.} \\ \text{day} = \frac{1}{365} \text{ year} \end{bmatrix}$

$$\text{Time} = \frac{73 \times 1}{365}$$

$$\text{Time} = \frac{1}{5} \text{ year.}$$

$$I = \frac{PRT}{100}$$

$$= \frac{1000 \times 10 \times \frac{1}{5}}{100}$$

$$= \overset{20.}{\cancel{100}} \times \frac{1}{\cancel{5}}$$

$$= Rs. 20.$$

Simple interest = Rs.20.

Solution-02:-

It is given that,

Principal (P) = Rs.500

Time (T) = 4 years.

Rate of interest = 8% per annum.

Interest = ?

$$I = \frac{PRT}{100}$$

$$= \frac{500 \times 4 \times 8}{100}$$

$$I = Rs.160$$

Amount = principal + Interest

$$= Rs 500 + Rs 160$$

$$= Rs 660.$$

Solution-03:-

It is Given that,

Principal (P) = 400.

Rate of interest (R) = 5% per annum.

Time (T) = 2 years.

$$I = \frac{PRT}{100}$$

$$\text{Interest} = \frac{400 \times 5 \times 2}{100}$$

$$= Rs.40$$

Interest = Rs.40.

Solution-04:-

Principal (P) = RS 400

Rate of interest (R) = 6%

Time = 3 years.

Interest = ?

$$I = \frac{PRT}{100} = \frac{400 \times 6 \times 3}{100}$$

$$= RS. 72$$

Simple interest = RS 72.

Solution-05:-

Principal (P) = RS 25,000.

Rate of interest (R) = 20% percent per annum.

Time = 1 year.   [∵ per annum = 1 year]

Simple interest per annum = ?   for every one year.

$$I = \frac{PRT}{100}$$

$$= \frac{25000 \times 20 \times 1}{100}$$

$$= RS. 5,000$$

Simple interest Rs 5,000 per year.

Solution-06:-

It is given that.

Principal (P) = RS 8,000.

Rate of interest (R) = 8%.

Time period = $4\frac{1}{2}$ years. = $\frac{9}{2}$ years.

We know that,

Amount has to pay = Principal + Interest.

$$Interest = \frac{PRT}{100}$$

$$= \frac{8,000 \times 8 \times \frac{9}{2}}{100}$$

$$= 36 \times 80$$

$$= 2880$$

∴ Interest = RS. 2880.

∴ Amount has to pay = 8,000 + 2,880 = Rs.10,880.

Solution-07:- Rakesh lent out

→ Principal = RS 8,000 , Time = 5 years and Rate of Interest = 15%

$$Interest = \frac{PRT}{100} = \frac{8,000 \times 5 \times 15}{100} = 400 \times 15 = 6,000.$$

Rakesh Borrowed.

Principal RS = 6,000. Time = 3 years, Rate of interest = 12%

$$Interest = \frac{PRT}{100} = \frac{6,000 \times 3 \times 12}{100} = 180 \times 12 = RS 2160$$

Rakesh Gained money.

i.e = Rakesh lent out interest - Rakesh Borrowed Interest

= 6,000 - 216 = 3840.

∴ Gain = RS. 3840.   [∵ lent > Borrow]

Solution - 8 :-

Anitha deposited principal (P) = Rs 1000.

$\qquad$ Time = 1 year.

Rate of interest (R) = 5%.

$\qquad$ Interest = ?

$\qquad$ Amount = ?

Interest = $\dfrac{PRT}{100}$ = $\dfrac{1000 \times 5 \times 1}{100}$ = Rs. 50

Amount = Anitha diposited money + interest.

$\qquad$ = Rs 1000 + Rs 50

$\qquad$ = Rs 1050.

∴ Money Rs 1050 Anita get after one year.

Solution - 09 :-

Nalini borrowed = principal = Rs. 550.

Rate of interest = 8%.

$\qquad$ Time = 6 months. $\left[\text{Number of years} = \dfrac{\text{No. of monthly}}{12}\right]$

$\qquad$ Time = $\dfrac{6}{12}$ year = $\dfrac{1}{2}$ year

Interest = $\dfrac{PRT}{100}$ = $\dfrac{550 \times 8 \times \frac{1}{2}}{100}$ = $\dfrac{55 \times 8}{20}$

$\qquad\qquad$ = Rs. 22.

Amount = principal + interest

$\qquad$ = Rs. 550 + Rs 22 = Rs 572.

∴ she has to pay after 6 months is Rs 572.

Solution - 10 :-

Rohith. Borrowed money (P) = Rs 60,000.

$\qquad$ Rate of interest (R) = 8% & 9% per annum

$\qquad\qquad$ Time = 2 years.

$\qquad\qquad$ Simple interest = ?

$\qquad$ I = $\dfrac{PRT}{100}$

$\qquad\qquad$ = $\dfrac{60000 \times 9 \times 2}{100}$

$\qquad\qquad$ = 1200 × 9

$\qquad\qquad$ = 10,800.

$\qquad$ Interest = Rs 10,800.

Rohith lent principal (P) = Rs 60000.

$\qquad$ Rate of interest (R) = 10% per annum.

$\qquad\qquad$ Time = 2 years.

$\qquad\qquad$ Simple interest = ?

$\qquad$ I = $\dfrac{PRT}{100}$ = $\dfrac{60,000 \times 10 \times 2}{100}$

$\qquad\qquad$ = 12,000.

Rohith earned amount = Rohith lent interest −

$\qquad\qquad\qquad$ Rohith borrowed interest

$\qquad\qquad$ = 12,000 − 10,800

$\qquad\qquad$ = Rs 1200.

∴ Rohith earn from This transaction is Rs. 1200.

Solution - 11:-

Romesh Borrowed.

Principal = 2,000.

Rate of interest = 2%.

Time period = 2 years.

Interest for Rs 2,000 = $\frac{PRT}{100}$ = $\frac{2000 \times 2 \times 2}{100}$

= Rs 80

principal (P) = 1,000

Rate of interest (R) = 5%.

Time period = 2 years.

Interest for Rs 1000 = $\frac{PRT}{100}$ = $\frac{1000 \times 5 \times 2}{100}$

= $\frac{10000}{100}$

= Rs 100

Interest has to pay = Interest for Rs 2,000 +
                                    interest for Rs 1,000

= Rs 80 + Rs 100 = Rs 180.

Amount = Romesh Borrow principal + Interest has to pay

= 2000 + 1000 + 100 + 80. = 3180.

Romesh paid money = 2800.

It is given that, Amount = Romesh Paid + watch amount

watch Amount = 3180 - 2800 = Rs 380.

Solution - 12 :-

It is given that,

Mr. Garg lent amount = Rs 15,000.

Rest Money = 15,000 - 12,500

= 2,500.

Time period = 3 years.

Interest on Rs 12500 :-

Principal (P) = 12,500

Time period (T) = 3 years.

Rate of interest = 15%.

Interest = $\frac{PRT}{100}$ = $\frac{12,500 \times 3 \times 15}{100}$

= 375 × 15

= Rs 5,625.

Interest on Rs 2,500 :-

Principal (P) = 2,500.

Time period (T) = 3 years.

Rate of interest = 18%.

Interest = $\frac{PRT}{100}$ = $\frac{2,500 \times 3 \times 18}{100}$

= 75 × 18

= Rs 1350.

Total interest has to pay for Rs 15,000

= interest for Rs 12,500 + interest for Rs 2,500

= Rs 5,625 + Rs 1350 = Rs 6975.

Interest he earned is Rs 6975

Solution -13 :-

Shikha deposited amount = Rs 2000. = principal (P)
  Rate of interest = 6%.

Interest for one year on Rs 2000 = $\frac{PRT}{100}$

$$= \frac{PR}{100} \quad [\text{Time} = 1 \text{ year}]$$

$$= \frac{2000 \times 6}{100}$$

$$= Rs.120.$$

She withdrew Rs 700 at year Means.

  Shikha deposited amount in Bank = Rs 2,000 - Rs 700

$$= Rs 1300$$

Interest for Rs 1,300 = $\frac{1300 \times 6 \times 2}{100}$ $\left[\begin{array}{l} T = 2 \text{ years } \& \\ R = 6\% \end{array}\right]$

$$= Rs 156.$$

Shikha Balance After 3 years = 1300 +
              Interest for one year on Rs 2,000 +
              Interest on amount 1300 for 2 years

$$= 1300 + 120 + 156$$

$$= Rs 1576$$

∴ Shikha Balance after 3 years is Rs 1,576.

Solution -14 :-

Here, Principal (P) = Loan = 8000
    Rate of interest (R) = 18%.
      Time period = 2 years.
      Interest = ?.

$I = \frac{PRT}{100}$

$$= \frac{8,000 \times 18 \times 2}{100}$$

$$= 160 \times 18$$

$$= Rs 2880.$$

Total amount Reema has to pay = Principal + interest

$$= Rs 8000 + Rs 2,880$$

$$= Rs 10,880.$$

Reema Paid Total amount = 10,400 + wrist watch

∴ wrist watch cost = Total amount - 10,400

$$= 10,880 - 10,400$$

$$= 480$$

$$= Rs 480$$

∴ wrist watch cost = Rs. 480.

Solution - 15 :-

Here, principal (P) = Rs 20,000.

Rate of interest (R) = 10%.

Time period per annum.

Interest = ?

$$Interest = \frac{PRT}{100}$$

$$= \frac{20,000 \times 10 \times 1}{100}$$

$$= Rs. 2,000$$

income tax on interest earned $= \dfrac{2,000 \times 30}{100}$

$$= Rs. 600$$

income tax on interest earned = Rs 6,00.

$$= Rs 600.$$

his annual income = Interest - income tax.

$$= 2,000 - 6,00$$

$$= Rs 1,400.$$