Simple Interest

Interest

If we borrow money from a bank, then we return the sum after sometime with some extra money. This extra amount paid is known as interest.

Points to be Remember

- The amount borrowed is called principal or sum denoted by P.
- Extra amount is interest denoted by I.
- Time for which amount is borrowed is denoted by T.
- Amount = Principal + Interest
- Simple Interest $(SI) = \dfrac{P \times R \times T}{100}$
- If a person deposits ₹ x_1 in a bank at r_1% per annum and ₹ x_2 at r_2% per annum, then the interest for the whole sum is $\left[\dfrac{x_1 r_1 + x_2 r_2}{x_1 + x_2}\right]\%$.
- If a certain principal amounts to ₹ A_1 in t_1 yr and to ₹ A_2 in t_2 yr, then the sum is given by ₹ $\left(\dfrac{A_2 t_1 - A_1 t_2}{t_2 - t_1}\right)$ and the rate per cent per annum is given by $\left[\dfrac{100(A_2 - A_1)}{A_1 t_2 - A_2 t_1}\right]\%$.
- If two equal principals are deposited for t_1 and t_2 yr at r_1% and r_2% per annum such that the difference between their interests is D. Then, the principal can be obtained by $p = ₹\,\dfrac{D \times 100}{r_1 t_1 - r_2 t_2}$

Example 1. The sum required to earn a monthly interest of ₹400 at 10% per annum at simple interest is

(a) ₹ 2000 (b) ₹ 12000 (c) ₹ 24000 (d) ₹ 48000

Sol. (d) Total interest needed in a year
$$= ₹\ 400 \times 12 = ₹\ 4800$$
$$\therefore \quad P = \frac{100 \times SI}{R \times T} = \frac{4800 \times 100}{10 \times 1} = ₹\ 48000$$

Example 2. In what time will the simple interest on ₹ 400 at 10% per annum be the same as the simple interest on ₹ 1000 for 4 yr at 4% per annum?

(a) 2 yr   (b) 3 yr   (c) 4 yr   (d) 6 yr

Sol. (c) Here, $P = ₹1000, T = 4$ yr, $R = 4\%$

$\therefore$ Simple interest on ₹ 1000 $= \dfrac{1000 \times 4 \times 4}{100} = ₹\ 160$

Now, simple interest $= ₹\ 160$
$$P = ₹\ 400, R = 10\%, \text{ then}$$

$$T = \frac{100 \times SI}{P \times R} = \frac{100 \times 160}{400 \times 10} = 4 \text{ yr}$$

Example 3. At what rate per cent per annum will a sum of money double in 8 yr?

(a) 12%   (b) $12\frac{1}{2}\%$ (c) 13%   (d) 15%

Sol. (d) Let sum $= P$, then $SI = P$

As amount $= 2P$
and Time $= 8$ yr

$\therefore$ Rate $= \dfrac{100 \times SI}{\text{Sum} \times \text{Time}} = \left(\dfrac{100 \times P}{P \times 8}\right)\% = 12\frac{1}{2}\%$

Example 4. A certain sum amounts to ₹ 1586 in 2 yr and ₹ 1729 in 3 yr. Find the rate and the sum.

(a) 8%   (b) 9%   (c) 10%   (d) 11%

Sol. (d) Simple interest for 1 yr
$$= ₹\ (1729 - 1586) = ₹\ 143$$
Simple interest for 2 yr $= ₹\ 286$
$\therefore$ Principal $= ₹\ (1586 - 286) = ₹\ 1300$
$\therefore$ Rate, $R = \dfrac{100 \times SI}{P \times T}$
$$= \frac{100 \times 143}{1300 \times 1} = 11\%$$

Example 5. What amount instalment will discharge on debit of ₹ 3220 due in 4 yr at 10% simple interest?

(a) 500   (b) 600
(c) 700   (d) None of these

Sol. (c) Let the amount instalment be ₹ x. Then, according to the question,

(Amount of x for 3 yr) + (Amount of x for 2 yr)
$$+ \text{(Amount of } x \text{ for 1 yr)} + x = 3220$$

or $\left(x + \dfrac{x \times 10 \times 3}{100}\right) + \left(x + \dfrac{x \times 10 \times 2}{100}\right) + \left(x + \dfrac{x \times 10 \times 1}{100}\right)$
$$+ x = 3220$$

$\Rightarrow \quad 4x + \dfrac{30x}{100} + \dfrac{20x}{100} + \dfrac{10x}{100} = 3220$

$\Rightarrow \quad 400x + 30x + 20x + 10x = 322000$

$\Rightarrow \quad 460x = 322000 \Rightarrow x = ₹\ 700$

$\therefore \quad$ Each instalment $= ₹\ 700$

Example 6. A sum was put at simple interest at a certain rate for 2 yr. Had it been put at 3% higher rate, it would have fetched ₹ 300 more. The sum is

(a) ₹ 5000
(b) ₹ 6000
(c) ₹ 7000
(d) None of these

Sol. (a) Let the sum be P. Let the original rate be y% per annum. Then, new rate = (y + 3)% per annum

$$\therefore \quad \frac{P \times (y+3) \times 2}{100} - \frac{P \times y \times 2}{100} = 300$$

$$\Rightarrow \frac{Py + 3P}{100} - \frac{Py}{100} = 150 \Rightarrow Py + 3P - Py = 15000$$

$$\Rightarrow \quad 3P = 15000 \Rightarrow P = 5000$$

Thus, the sum is ₹ 5000.

Exercise

1. Find the amount on a sum of ₹ 400 for 3 yr at simple interest at 5% per annum.
   (a) ₹ 460   (b) ₹ 415   (c) ₹ 435   (d) ₹ 412

2. If a certain sum is doubled in 8 yr on simple interest, in how many years will it be four times?
   (a) 24 yr   (b) 16 yr   (c) 32 yr   (d) 12 yr

3. A sum of money at simple interest amount to ₹ 1260 in 2 yr and ₹1350 in 5 yr, then the rate per cent per annum is
   (a) 30%   (b) 10%   (c) 2.5%   (d) 5%

4. The difference of 13% per annum and 12% of a sum in 1 yr is ₹ 110. Then, the sum is
   (a) ₹ 12000   (b) ₹ 13000   (c) ₹ 11000   (d) ₹ 16000

5. The simple interest on a sum of money at 10% per annum for 6 yr is half the sum. Then, the sum is
   (a) ₹ 5000   (b) not possible
   (c) ₹ 4000   (d) ₹ 6000

6. The sum which amounts to ₹ 480 in 5 yr at the rate of 8% per annum simple interest is
   (a) ₹ $\dfrac{100 \times 8 \times 5 + 100}{840}$
   (b) ₹ $\dfrac{100 + 840}{100 + 5 \times 8}$
   (c) ₹ $\dfrac{100 \times 840}{100 + 5 \times 8}$
   (d) ₹ $\dfrac{840 \times 5 \times 8}{100}$

7. A certain sum at simple interest amounts to ₹ 1040 in 3 yr and to ₹ 1360 in 7 yr. Then, the sum is
   (a) ₹ 750   (b) ₹ 800   (c) ₹ 900   (d) ₹ 1000

8. The simple interest at x% for x years will be ₹ x on a sum of
   (a) ₹ x   (b) ₹ 100x   (c) ₹ $\left(\dfrac{100}{x}\right)$ (d) ₹ $\left(\dfrac{100}{x^2}\right)$

9. A certain sum lent out at simple interest amounts to ₹ 575 in 3 yr and to ₹ 625 in 5 yr. Then, the rate of interest is
   (a) ₹ 3%   (b) ₹ 5%   (c) ₹ 4%   (d) ₹ 7%

10. A person invested some amount at the rate of 12% simple interest and the remaining at 10%. He received yearly an interest of ₹ 130. Had he interchanged the amounts invested, he would have received an interest of ₹ 134. How much money did he invest at different rates?   **(CDS 2010 I)**
    (a) ₹ 500 at the rate of 10%, ₹ 800 at the rate of 12%
    (b) ₹ 700 at the rate of 10%, ₹ 600 at the rate of 12%
    (c) ₹ 800 at the rate of 10%, ₹ 400 at the rate of 12%
    (d) ₹ 700 at the rate of 10%, ₹ 500 at the rate of 12%

11. A man borrowed ₹ 40000 at 8% simple interest per year. At the end of second year he paid back certain amount and at the end of fifth year he paid back ₹ 35960 and cleared the debt. What is the amount did he pay back after the second year?   **(CDS 2007 I)**
    (a) ₹ 16200   (b) ₹ 17400
    (c) ₹ 18600   (d) None of these

12. Find what sum of money will amount to ₹ 900 in 4 yr at 5% per annum on simple interest?
    (a) ₹ 750   (b) ₹ 650   (c) ₹ 500   (d) ₹ 550

13. A sum of ₹ 1550 was lent partly at 5% and partly at 8% simple interest. The total interest received after 3 yr was ₹ 300. The ratio of money lent at 5% to 8% is
    (a) 11 : 12   (b) 16 : 15   (c) 12 : 21   (d) 11 : 13

14. Rahim buys a house and pays ₹ 8000 cash and ₹ 9600 at 5 yr credit at 4% per annum simple interest. Then, the cash price of the house
    (a) ₹ 10000   (b) ₹ 9600   (c) ₹ 17000   (d) ₹ 16000

15. In what time the simple interest on a sum of money be $\dfrac{3}{8}$ of the principal with rate of interest $3\dfrac{1}{8}$%?
    (a) 9 yr   (b) 6 yr   (c) 12 yr   (d) 15 yr

16. If the rate of simple interest is 12% per annum the amount that would fetch interest of ₹ 6000 per annum is
    (a) ₹ 7200   (b) ₹ 72000
    (c) ₹ 50000   (d) ₹ 48543.69

17. A lends a sum of money for 10 yr at 5% simple interest, B lends double that amount for 5 yr at the same rate of interest. Which of the following statement is true in this regard?
    (a) A will get twice the amount of interest that B would get.
    (b) B will get twice the amount of interest that A would get.
    (c) A and B will get the same amount as interest.
    (d) B will get four times the amount of interest that A would get.

18. Consider the following statements
    If a sum of money is loaned at simple interest, then the
    I. money gets doubled in 5 yr, if the rate of interest is $16\dfrac{2}{3}$%.
    II. money gets doubled in 5 yr, if the rate of interest is 20%.

III. money becomes four times in 10 yr, if it gets doubled in 5 yr.

Of these statements
(a) I and III are true
(b) II alone is true
(c) III alone is true
(d) II and III are true

19. Out of a sum of ₹ 625 a part was lent at 5% and the other at 10% simple interest. If the interest on the first part after 2 yr is equal to the interest on the second part after 4 yr, then the second sum (in ₹) is
(a) ₹ 125
(b) ₹ 200
(c) ₹ 250
(d) ₹ 300

20. A man invests an amount of ₹ 15860 in the names of his three sons A, B and C in such away that they get the same interest after 2, 3 and 4 yr, respectively. If the rate of simple interest is 5%, then the ratio of the amounts invested among A, B and C will be
(a) 10 : 15 : 20
(b) $\dfrac{1}{10} : \dfrac{1}{15} : \dfrac{1}{20}$
(c) 110 : 115 : 120
(d) $\dfrac{1}{110} : \dfrac{1}{115} : \dfrac{1}{120}$

21. A sum was put at simple interest at a certain rate for 2 yr. Had it been put at 3% higher rate, it would have fetched ₹ 72 more. The sum is
(a) ₹ 1200 (b) ₹ 1600 (c) ₹ 1900 (d) ₹ 1400

22. The rate of simple interest in two banks A and B are in the ratio 5 : 4. A person wants to deposit his total savings in two banks in such away that he received equal half yearly interest from both. He should deposit the savings in banks A and B in the ratio
(a) 5 : 2 (b) 2 : 5 (c) 4 : 5 (d) 5 : 4

23. A certain sum at simple interest amounts to ₹ 1350 in 5 yr and to ₹ 1620 in 8 yr. What is the sum? **(CDS 2011 I)**
(a) ₹ 700
(b) ₹ 800
(c) ₹ 900
(d) ₹ 1000

24. At what rate per cent per annum simple interest, will a sum of money triple itself in 25 yr? **(CDS 2008 II)**
(a) 8% (b) 9% (c) 10% (d) 12%

25. A man invested ₹ 1000 on a simple interest at a certain rate and ₹ 1500 at 2% higher rate. The total interest in 3 yr in ₹ 390. What is the rate of interest for ₹ 1000? **(CDS 2007 II)**
(a) 4% (b) 5% (c) 6% (d) 8%

26. Out of a sum of ₹ 640, a part was lent at 6% simple interest and the other at 9% simple interest. If the interest on the first part after 3 yr is equal to the interest on the second part after 6 yr, then what is the second part? **(CDS 2008 I)**
(a) ₹ 120 (b) ₹ 140 (c) ₹ 160 (d) ₹ 180

Answers

1. (a)	2. (a)	3. (c)	4. (c)	5. (b)	6. (c)	7. (b)	8. (c)	9. (b)	10. (d)
11. (b)	12. (a)	13. (b)	14. (d)	15. (c)	16. (c)	17. (c)	18. (b)	19. (a)	20. (b)
21. (a)	22. (c)	23. (c)	24. (a)	25. (a)	26. (c)				

Hints and Solutions

1. Interest $= \dfrac{400 \times 3 \times 5}{100} = ₹\,60$

So, Amount $= P + I = 400 + 60 = ₹\,460$

2. Let the sum be ₹ x, so amount = ₹ $2x$

$SI = ₹\,x$

Let R be rate of interest.

$\therefore \quad R = \dfrac{100 \times SI}{P \times T} = \dfrac{100 \times x}{x \times 8} = 12.5\%$

Now, the needed amount = ₹ $4x$

$\therefore \quad SI = ₹\,(4x - x) = ₹\,3x$

$\therefore \quad T = \dfrac{100 \times SI}{P \times R} = \dfrac{100 \times 3x}{x \times 12.5} = 24\,\text{yr}$

3. Simple interest in 3 yr $= ₹\,(1350 - 1260) = ₹\,90$

$\therefore$ Simple interest for 2 yr $= \dfrac{2}{3} \times 90 = ₹\,60$

$\therefore \quad$ Principal $= ₹\,(1260 - 60) = ₹\,1200$

$\therefore \quad$ Rate, $R = \dfrac{100 \times SI}{P \times T} = \dfrac{100 \times 60}{1200 \times 2} = \dfrac{60}{24} = \dfrac{5}{2}$

$R = 2.5\%$

4. Let the sum be ₹ x.

Then, $\dfrac{x \times 13 \times 1}{100} - \dfrac{x \times 12 \times 1}{100} = 110 \Rightarrow \dfrac{x}{100} = 110$

$\Rightarrow \quad x = 110 \times 100 = ₹\,11000$

5. Let the sum be ₹ x.

$\therefore \quad$ Simple interest $= ₹\,\dfrac{x}{2}$

and $\quad T = 6\,\text{yr}, R = 10\%$ per annum

$\therefore \quad SI = \dfrac{P \times R \times T}{100}$

$\dfrac{x}{2} = \dfrac{x \times 10 \times 6}{100}$

$\dfrac{1}{2} = \dfrac{6}{10}$

$\Rightarrow$ Which is not true, so it is not a possible case.

6. Let the sum be ₹ 100.

Then, Amount $= (\text{Sum} + SI)$

$= \left(100 + \dfrac{100 \times 8 \times 5}{100}\right) = (100 + 8 \times 5)$

So, when the amount is $(100 + 8 \times 5)$, Sum = 100

When the amount is 840, Sum = ₹ $\left(\dfrac{100 \times 840}{100 + 8 \times 5}\right)$

7. Simple interest for 4 yr = ₹ $(1360 - 1040)$ = ₹ 320

Simple interest for 3 yr = ₹ $\left(\dfrac{320}{4} \times 3\right)$ = ₹ 240

∴   Sum = ₹ $(1040 - 240)$ = ₹ 800

8. As, Sum = $\dfrac{100 \times SI}{Time \times Rate}$

Here, let $R = x\%, T = x$ years and simple interest = ₹ x

∴   Sum = $\dfrac{100 \times x}{x \times x} = \dfrac{100}{x}$

9. Let the sum = ₹ x and rate of interest = $R\%$

Simple interest for 2 yr = ₹ $(625 - 575)$ = ₹ 50

∴   Sum of money, x = ₹ $(575 - 3 \times 25)$

= ₹ $(575 - 75)$ = ₹ (500)

∴ $R = \dfrac{100 \times SI}{Sum \times Time} = \dfrac{100 \times 75}{500 \times 3} = 5\%$

10. Let the person invest amount x and y into two different rates of interest.

∴ $\dfrac{x \times 12 \times 1}{100} + \dfrac{y \times 10 \times 1}{100} = 130$ $\left(\because SI = \dfrac{PRT}{100}\right)$

⇒ $12x + 10y = 13000$ ...(i)

and $\dfrac{y \times 12 \times 1}{100} + \dfrac{x \times 10 \times 1}{100} = 134$

⇒ $12y + 10x = 13400$ ...(ii)

On solving Eqs. (i) and (ii), we get

x = ₹ 500 and y = ₹ 700

11. Total borrowed money = ₹ 40000

and rate of interest = 8%

The interest for 2 yr = $\dfrac{40000 \times 8 \times 2}{100}$ = ₹ 6400

Let he paid ₹ x at the end of second year.

∴ Interest will be calculated on ₹ $(40000 - x + 6400)$

Interest for 3 yr = $\dfrac{(46400 - x) \times 3 \times 8}{100}$

= ₹ $\dfrac{6}{25}(46400 - x)$

∴ $\dfrac{6}{25}(46400 - x) + 46400 - x = 35960$

⇒ $11136 - \dfrac{6x}{25} + 46400 - x = 35960$

⇒ $\dfrac{31x}{25} = 21576 \Rightarrow x = \dfrac{21576 \times 25}{31}$ = ₹ 17400

12. Let the sum of money be ₹ x.

∴   Amount = $x + \dfrac{x \times 5 \times 4}{100}$

But   amount = ₹ 900

∴ $900 = x + \dfrac{20x}{100}$

⇒ $900 = \dfrac{6x}{5} \Rightarrow x = \dfrac{900 \times 5}{6}$ = ₹ 750

13. Let sum lent at rate 5% be ₹ x.

Then, sum lent at rate 8% = ₹ $(1550 - x)$

∴ Simple interest in first case = $\dfrac{x \times 5 \times 3}{100}$

Simple interest in second case = $\dfrac{(1550 - x) \times 8 \times 3}{100}$

But $\dfrac{x \times 15}{100} + \dfrac{(1550 - x) \times 24}{100} = 300$

$\dfrac{15x}{100} + \dfrac{37200}{100} - \dfrac{24x}{100} = 300$

$\dfrac{-9x}{100} = 300 - 372$

$\dfrac{-9x}{100} = -72 \Rightarrow x = \dfrac{72 \times 100}{9}$

⇒ x = ₹ 800

Amount lent at rate 8% = ₹ $(1550 - 800)$ = ₹ 750

∴ Required ratio = $\dfrac{800}{750} = \dfrac{16}{15} = 16 : 15$

14. Let the amount remaining to pay be ₹ x.

∴ Price of house = ₹ $(x + 8000)$

$9600 - \dfrac{x \times 4 \times 5}{100} = x$

$9600 - \dfrac{x}{5} = x$

$9600 = \dfrac{6x}{5}$

$\dfrac{9600 \times 5}{6} = x \Rightarrow x$ = ₹ 8000

∴   Cash price of the house = ₹ $(8000 + 8000)$

= ₹ 16000

15. Here, rate of interest = $3\dfrac{1}{8}\% = \dfrac{25}{8}\%$

Let principal be ₹ x.

And simple interest = ₹ $\dfrac{3}{8}x$

∴ $\dfrac{3}{8}x = \dfrac{x \times \dfrac{25}{8} \times T}{100}$

$\dfrac{300}{25} = T \Rightarrow T = 12$ yr

16. Rate of interest = 12% per annum

Simple interest = ₹ 6000 per annum

Let principal is ₹ P.

∴ $6000 = \dfrac{P \times 1 \times 12}{100}$

∴ $P = \dfrac{6000 \times 100}{12}$

= ₹ 50000

Hence, the required amount is ₹ 50000.

17. **For A** Let the amount be ₹ x. Rate of interest = 5%, Time = 10 yr

∴ Simple interest = $\dfrac{x \times 5 \times 10}{100} = \dfrac{x}{2}$

For B The amount be ₹ $2x$.

Rate of interest = 5%, Time = 5 yr

$SI = \dfrac{2x \times 5 \times 5}{100} = \dfrac{x}{2}$

∴ A and B both will get the same amount as interest.

18. Let simple interest of ₹ x for 5 yr is ₹ x.

Then, Rate = $\dfrac{100 \times x}{x \times 5} = 20\%$

Hence, Ist statement is false and IInd statement is true. As money becomes four times in 10 yr.

∴ If principal = ₹x

Then, simple interest = ₹ $(4x - x)$ = ₹ $3x$

and Rate = 20% as it down in years

∴ Time = $\dfrac{100 \times 3x}{x \times 20} = 15$ yr

So, IIIrd statement is false.

19. Let the first part = ₹ x and the second part = ₹ $(625 - x)$ as the simple interest on both part in same.

So, $\dfrac{x \times 5 \times 2}{100} = \dfrac{(625 - x) \times 10 \times 4}{100}$

⇒ $10x = (625 - x)40$

⇒ $x = (625 - x)4$

⇒ $4x + x = 625 \times 4$

⇒ $5x = 625 \times 4 \Rightarrow x = \dfrac{625 \times 4}{5}$

∴ $x = ₹\ 500$

∴ Second part = ₹ $(625 - 500)$ = ₹ 125

20. Let the amount of A = ₹ a and time = 2 yr.

∴ Interest of A = $\dfrac{a \times 2 \times 5}{100}$

Let the amount of B = ₹ b and time = 3 yr.

∴ Interest of B = $\dfrac{b \times 3 \times 5}{100}$

Let the amount of C = ₹ c and time = 4 yr.

∴ Interest of C = $\dfrac{c \times 4 \times 5}{100}$

But $\dfrac{a \times 10}{100} = \dfrac{b \times 15}{100} = \dfrac{c \times 20}{100}$

⇒ $10a = 15b = 20c = k$

So, $a = \dfrac{k}{10}, b = \dfrac{k}{15}, c = \dfrac{k}{20} \therefore a:b:c = \dfrac{1}{10}:\dfrac{1}{15}:\dfrac{1}{20}$

21. Let the sum be ₹ x and the original rate $r\%$, then

Simple interest = $\dfrac{x \times r \times 2}{100}$

Now, rate is increased by 3%.

∴ New rate = $(r + 3)$

∴ Simple interest = $\dfrac{x \times (r + 3) \times 2}{100}$

∴ $\dfrac{x \times (r + 3) \times 2}{100} - \dfrac{x \times r \times 2}{100} = 72$

∴ $\dfrac{(xr + 3x)2}{100} - \dfrac{2xr}{100} = 72$

$\dfrac{2xr + 6x - 2xr}{100} = 72$

∴ $6x = 72 \times 100$

∴ $x = \dfrac{72 \times 100}{6} \Rightarrow x = ₹\ 1200$

22. Let the amount interest be 'a' and 'b' and let the rates be $5r$ and $4r$.

Then, $a \times \dfrac{1}{2} \times \dfrac{5r}{100} = b \times \dfrac{1}{2} \times \dfrac{4r}{100}$

⇒ $\dfrac{a}{b} = \dfrac{40}{50} = \dfrac{4}{5}$ So, $a:b = 4:5$

23. Let $A_1 = ₹\ 1350$, $A_2 = ₹\ 1620$

$t_1 = 5$ yr and $t_2 = 8$ yr

Let principal amount be ₹ P.

∴ In time = $8 - 5 = 3$ yr

Simple interest will be

$1620 - 1350 = ₹\ 270$

∴ $r = \dfrac{(A_2 - A_1) \times 100}{A_1 t_2 - A_2 t_1}$

$= \dfrac{(1620 - 1350) \times 100}{(1350 \times 8 - 1620 \times 5)}$

$= \dfrac{270 \times 100}{10800 - 8100} = \dfrac{27000}{2700} \Rightarrow r = 10\%$

∴ $P = \dfrac{SI \times 100}{r \times T} = \dfrac{270 \times 100}{10 \times 3} = ₹\ 900$

24. Let principal amount = P

As Amount = $3P, T = 25$ yr

∴ $SI = 3P - P = 2P$

∵ Rate = $\dfrac{100 \times SI}{Principal \times T} = \dfrac{100 \times 2P}{P \times 25} = 8\%$

25. Let a man invest ₹ 1000 at a $R\%$.

By given condition,

$\dfrac{1000 \times R \times 3}{100} + \dfrac{1500 \times (R + 2) \times 3}{100} = 390$

⇒ $30R + 46R + 90 = 390$

⇒ $75R = 300 \Rightarrow R = 4\%$

26. Let first part be ₹ x, then second part is ₹ $(640 - x)$.

By given condition, $\dfrac{x \times 3 \times 6}{100} = \dfrac{(640 - x) \times 6 \times 9}{100}$

⇒ $4x = 640 \times 3 \Rightarrow x = ₹\ 480$

∴ Required second part = ₹ $(640 - 480)$ = ₹ 160