



**Solution:**

DATE OF DRAWING	AMOUNT RS	NO OF MONTHS TILL 31/3/16	INTEREST RS
1/6/15	6000	10	$6000 \times 9/100 \times 10/12 = 450$
1/9/15	9000	7	$9000 \times 9/100 \times 7/12 = 472.5$
1/12/15	11000	4	$11000 \times 9/100 \times 4/12 = 330$
1/2/16	4000	2	$4000 \times 9/100 \times 2/12 = 60$
1/3/16	6000	1	$6000 \times 9/100 \times 1/12 = 45$
Total interest on A'S drawing			1357.5

As we can see interest table method is very time consuming and cumbersome an alternative to interest table method is product table method. Now we will see how product method works with the same example given above.

2) **PRODUCT TABLE METHOD:** In this method interest is calculated only once instead of calculated again and again. This reduces the calculations and saves time. Therefore I suggest to follow product table method instead of interest table method. In this method interest is calculated on total product at a given rate of interest for one month only.

**EXAMPLE:** suppose partner A has made the following drawing for the year ending 31/03/16.

DATE	AMOUNT OF DRAWING Rs.
June 1, 2015	6000
September 1, 2015	9000
December 1, 2015	11000
February 1, 2016	4000
March 1, 2016	6000

Calculate interest on drawing @ 9 % p a for the year ending 31<sup>st</sup> march, 2016

**Solution:**

DATE OF DRAWING	AMOUNT RS	NO OF MONTHS TILL 31/3/16	PRODUCT Amount*no. of months
1/6/15	6000	10	60000
1/9/15	9000	7	63000
1/12/15	11000	4	44000
1/2/16	4000	2	8000
1/3/16	6000	1	6000
TOTAL PRODUCT			181000

INTEREST ON DRAWING=Total product \* rate of interest \* 1/12

INTEREST ON DRAWING=181000\*9/100\*1/12 = RS 1357.5

When partner withdraws different amount (amount of drawing are not same) and that to at different intervals both the method discussed above can be used but preference should be given to product table method as it saves time because of lesser calculations.

But in actual practice partners withdraws same amount every month as they knows their monthly expenditure and that to at the same date of every month. For this we have short cut method for this. The following possibilities can occurs.

**CASE A:** when a partner withdraws fixed amount on the first day of every month for full year.

In this case interest will be calculated for full year drawing at a given rate of interest for 6.5 months.

Full year drawing = Amount of drawing per month \*12

INTEREST OF DRAWING=Full year drawing \*rate of interest/100 \*6.5/12

Example: suppose partner A withdraws Rs 1000 per month on the first day of every month for full year. Calculate interest on drawing @ 9 % p.a. on A's drawing

$$1000*12 = 12000$$

$$12000*9/100*6.5/12$$

$$=RS. 585$$

**CASE B:** when a partner withdraws fixed amount on the last day of every month for full year.

In this case interest will be calculated for full year drawing at a given rate of interest for 5.5 months.

Full year drawing = Amount of drawing per month \*12

**INTEREST OF DRAWING=Full year drawing \*rate of interest/100 \*5.5/12**

**Example: suppose partner A withdraws Rs 1000 per month on the last day of every month for full year. Calculate interest on drawing @ 9 % p.a. on A's drawing**

$$1000*12 = 12000$$

$$12000*9/100*5.5/12$$

$$=RS. 495$$

**CASE C:** when a partner withdraws fixed amount on the middle of every month for full year. (i.e. 15<sup>th</sup> of every month)

In this case interest will be calculated for full year drawing at a given rate of interest for 6 months.

**Full year drawing = Amount of drawing per month \*12**

**INTEREST OF DRAWING=Full year drawing \*rate of interest/100 \*6/12**

**Example: suppose partner A withdraws Rs 1000 per month on the middle of every month for full year. Calculate interest on drawing @ 9 % p.a. on A's drawing**

$$1000*12 = 12000$$

$$12000*9/100*6/12$$

$$= RS.540$$

**CASE D:** If nothing has been given in the question regarding the date of the drawing as well as the amount of drawing withdrawn per month. In this case we will assume that the partner has made the drawings in equal instalments every month and that too at the middle of every month. I.e.15<sup>th</sup> of every month therefore we will charge interest on drawing on full year drawing at a given rate of interest for 6 months.

**EXAMPLE:** suppose ram has withdrawn RS 30000 for his personal expenses in the financial year ending 2016 calculate interest on drawing on Ram's drawing for year ending march2016 @ 10 % p.a.

**Solution:**  $30000*10/100*6/12$

$$= RS 1500$$

**CASE E:** when a partner withdraws fixed amount on the first day of every month for half year or for 6 months.

In this case interest will be calculated for 6 months drawing at a given rate of interest for 3.5 months.

**Six months drawing = Amount of drawing per month \*6**

**INTEREST OF DRAWING=six months drawing \*rate of interest/100 \*3.5/12**

**Example: suppose partner A withdraws Rs 1000 per month on the first day of every month for six months. Calculate interest on drawing @ 9 % p.a. on A's drawing**

$$1000 * 6 = 6000$$

$$6000 * 9 / 100 * 3.5 / 12$$

$$= \text{RS. } 157.5$$

**CASE F:** when a partner withdraws fixed amount on the last day of every month for 6 months.

In this case interest will be calculated for six month drawing at a given rate of interest for 2.5 months.

$$\text{Six months drawing} = \text{Amount of drawing per month} * 6$$

$$\text{INTEREST OF DRAWING} = \text{six months drawing} * \text{rate of interest} / 100 * 2.5 / 12$$

Example: suppose partner A withdraws Rs 1000 per month on the last day of every month for six months. Calculate interest on drawing @ 9 % p.a. on A's drawing

$$1000 * 6 = 6000$$

$$6000 * 9 / 100 * 2.5 / 12$$

$$= \text{RS. } 112.5$$

**CASE G:** when a partner withdraws fixed amount on the middle of every month for six months. (i.e. 15<sup>th</sup> of every month)

In this case interest will be calculated for six month drawing at a given rate of interest for 3 months.

$$6 \text{ months drawing} = \text{Amount of drawing per month} * 6$$

$$\text{INTEREST OF DRAWING} = 6 \text{ months drawing} * \text{rate of interest} / 100 * 3 / 12$$

Example: suppose partner A withdraws Rs 1000 per month on the middle of every month for six months. Calculate interest on drawing @ 9 % p.a. on A's drawing

$$1000 * 6 = 6000$$

$$6000 * 9 / 100 * 3 / 12$$

$$= \text{RS. } 135$$

**SOMETIMES PARTNER WITHDRAWS QUARTERLY IN THIS CASE CALCULATION OF INTEREST ON DRAWING WILL BE DONE AS FOLLOWS.**

**CASE H:** If a partner withdraws on the first day of every quarter then interest on drawing will be calculated for full years drawing for 7.5 months at a given rate of interest.

Example: suppose a Ravi withdraws RS 6000 on the first day of every quarter for financial year 2016-17. calculate interest on partners drawing at 10 % p.a.

Solution: Dates of drawing and months for which Ravi uses this amount are given below:

DATE OF DRAWING	AMOUNT	MONTHS TILL 31 <sup>ST</sup> MARCH
1/4/16	6000	12
1/7/16	6000	9
1/10/16	6000	6
1/1/17	6000	3

Now we can calculate interest on Ravi's drawing with the help of short cut method or product table method. For the ease of students I will solve it by both the methods.

A) Product method

DATE OF DRAWING	AMOUNT	MONTHS TILL 31 <sup>ST</sup> MARCH	PRODUCT
1/4/16	6000	12	72000
1/7/16	6000	9	54000
1/10/16	6000	6	36000
1/1/17	6000	3	18000
			-----
			180000
			-----

$$180000 * 10 / 100 * 1 / 12$$

$$= 1500$$

IMPORTANT: NOW WE WILL DO THE SAME EXAMPLE WITH SHORT CUT METHOD.

$$\text{Full year drawing} = 6000 * 4$$

$$= 24000$$

$$\text{Interest on drawing} = \text{full year drawing} * \text{rate} / 100 * 7.5 / 12$$

$$= 24000 * 10 / 100 * 7.5 / 12$$

$$= \text{RS.1500}$$

**CASE I:** If a partner withdraws on the last day of every quarter then interest on drawing will be calculated for full years drawing for 4.5 months at a given rate of interest.

**Example:** suppose a Ravi withdraws RS 6000 on the last day of every quarter for financial year 2016-17. calculate interest on partners drawing at 10 % p.a.

**Solution:** Dates of drawing and months for which Ravi uses this amount are given below:

DATE OF DRAWING	AMOUNT	MONTHS TILL 31 <sup>ST</sup> MARCH 2017
30/6/16	6000	9
30/9/16	6000	6
31/12/16	6000	3
31/3/17	6000	0

Interest on drawing =  $24000 \times 10/100 \times 4.5/12$  = RS 900

**CASE J:** If a partner withdraws on the middle of every quarter then interest on drawing will be calculated for full years drawing for 6 months at a given rate of interest.

**Example:** suppose a Ravi withdraws RS 6000 on the middle of every quarter for financial year 2016-17. calculate interest on partners drawing at 10 % p.a.

**Solution:** Dates of drawing and months for which Ravi uses this amount are given below:

DATE OF DRAWING	AMOUNT	MONTHS TILL 31 <sup>ST</sup> MARCH 2017
15/5/16	6000	10.5
15/8/16	6000	7.5
15/11/16	6000	4.5
15/2/17	6000	1.5

Interest on drawing =  $24000 \times 10/100 \times 6/12$   
 = RS 1200