

Simple Interest By Decimals

Case 2

Rule

Multiply the ratio by the time add unity to the product for a divisor by which sum divide the amount & the quotient will be the principal

Examples

What principal will amount to 873£ 19s in 9 years at 6 per cent p. a.

$$\begin{array}{r} 30 \overline{) 19} \\ 60 \\ \underline{10} \\ 100 \\ 60 \\ \underline{40} \\ 400 \\ 60 \\ \underline{340} \\ 60 \\ \underline{340} \\ 0 \end{array}$$

What principal will amount to 956£ 10s 4.125d in 8 1/2 years at 5 1/2 per cent p. a.

$$\begin{array}{r} 875 \\ 4375 \\ \underline{145125} \\ 145125 \\ \underline{145125} \\ 0 \end{array}$$

Rule Subtract the principal from the amount divide the remainder by the product of the time & principal & the quotient will be the rate

Examples

At what rate per cent will 367£ 10s amount to 873£ 19s in 9 years

$$\begin{array}{r} 873 \cdot 19 \\ 367 \cdot 10 \\ \underline{506} \\ 129 \cdot 00 \\ 612 \cdot 00 \\ \underline{102150} \end{array}$$

At what rate per cent will 645£ 13s amount to 956£ 10s 4.125d in 8 1/2 years

$$\begin{array}{r} 12 \overline{) 4.125} \\ 20 \overline{) 1034375} \\ 40655171875 \\ \underline{64875} \\ 3107671875 \\ \underline{283515625} \\ 282515625 \\ \underline{282515625} \\ 0 \end{array}$$

Simple Interest By Decimals

Case 2

Rule Subtract the principal from the amount divide the remainder by the product of the ratio & principal & the quotient will be the time

Examples

On what time will 367£ 10s amount to 873£ 19s at 6 per cent per annum

$$\begin{array}{r} 30 \overline{) 19} \\ 60 \\ \underline{10} \\ 100 \\ 60 \\ \underline{40} \\ 400 \\ 60 \\ \underline{340} \\ 60 \\ \underline{340} \\ 0 \end{array}$$

On what time will 645£ 13s amount to 956£ 10s 4.125d at 5 1/2 per cent per annum

$$\begin{array}{r} 20 \overline{) 15} \\ 40 \\ \underline{10} \\ 100 \\ 40 \\ \underline{60} \\ 600 \\ 40 \\ \underline{400} \\ 200 \\ 40 \\ \underline{400} \\ 0 \end{array}$$

Involution

Is the multiplying any number with itself & that product by the former multiply &c. on & the several products which arises are called powers. The number denoting the height of the power is called the index or exponent of that power

Examples

What is the cube of 2.3.4

$$\begin{array}{r} 2.34 \\ 2.34 \\ \underline{1116} \\ 1270 \\ 308 \\ \underline{64516} \\ 234 \\ \underline{258064} \\ 322880 \\ \underline{124032} \\ 16387064 \end{array}$$

What is the square of 7.4

$$\begin{array}{r} 7.4 \\ 7.4 \\ \underline{29} \\ 29 \\ \underline{561} \\ 56 \\ \underline{516} \\ 50 \\ \underline{516} \\ 0 \end{array}$$