

Extraction of The

A Square number is that which is Contained under two Equal Numbers or that which is Equally Equal,
 So 4 is a Square number Contained under two Equal numbers, To wit 2, and, for 2 times 2 is 4, and the Square number 9 is Contained under 3 times 3 for 3 times 3 is 9 and of the rest as in the following Table — A Table of Squares with their Genitive Equal numbers as far as the 9 Digits &c

1	2	3	4	5	6	7	8	9
2	4	9	16	25	36	49	64	81

The Root of your first period Take you
 Must place in quote if you work true
 whose Square from your said period Then
 you must Subtract and to the remain
 Another periods being brought
 you must Divide as here is taught
 by the Double of your quote, but see
 which place will be supplied by the Square
 of your next quoted figure there
 Next multiply Subtract and then
 Repeat your work unto the end
 and if your numbers be Fractionals
 add pairs of Cyphers for a Decimal

Examples

Square Root

Demand the Square Root of 73621 and the proof

$$\begin{array}{r}
 73621 \text{ (271 Answer)} \\
 2 \\
 \hline
 47 \overline{)336} \\
 \underline{329} \\
 541 \overline{)721} \\
 \underline{541} \\
 180 \text{ Remainder} \\
 271 \\
 \underline{271} \\
 271 \\
 \underline{271} \\
 1897 \\
 542 \overline{)180} \text{ Remainder added} \\
 \hline
 73621 \text{ Proof } \& \text{C}
 \end{array}$$

Demand the Square Root of 3925 and the proof

$$\begin{array}{r}
 3925 \text{ (62 Answer)} \\
 36 \\
 \hline
 122 \overline{)325} \\
 \underline{244} \\
 81 \\
 62 \\
 \underline{62} \\
 124 \\
 372 \\
 \underline{372} \\
 3925 \text{ Proof}
 \end{array}$$

Demand the Square Root of 797 and the proof

$$\begin{array}{r}
 797 \text{ (28 Answer)} \\
 48 \overline{)397} \\
 \underline{384} \\
 13 \\
 28 \\
 \underline{28} \\
 224 \\
 563 \\
 \hline
 797 \text{ Proof}
 \end{array}$$

Demand the Square Root of 457621 and the proof

$$\begin{array}{r}
 457621 \text{ (676 Answer)} \\
 36 \\
 127 \overline{)976} \\
 \underline{889} \\
 1346 \overline{)8721} \\
 \underline{8076} \\
 645 \\
 676 \\
 \underline{676} \\
 4056 \\
 4732 \\
 4056 \\
 \hline
 457621 \text{ Proof}
 \end{array}$$

Demand the Square Root of 7654321 & the Proof

Answer

$$\begin{array}{r}
 7654321 \overline{) 2766} \\
 \underline{1} \\
 47 \overline{) 365} \\
 \underline{329} \\
 546 \overline{) 3643} \\
 \underline{3276} \\
 5526 \overline{) 36721} \\
 \underline{33156} \\
 \underline{\underline{3565}}
 \end{array}$$

$$\begin{array}{r}
 2766 \\
 \underline{2766} \\
 16596 \\
 \underline{16596} \\
 19362 \\
 \underline{5532} \\
 \underline{\underline{7654321}} \text{ Proof}
 \end{array}$$

Demand the Square Root of 9984375832 & the Proof

9984375832 (99921 Answer

$$\begin{array}{r}
 81 \\
 189 \overline{) 1884} \\
 \underline{1701} \\
 1989 \overline{) 18337} \\
 \underline{17901} \\
 19982 \overline{) 43658} \\
 \underline{39964} \\
 199841 \overline{) 369432} \\
 \underline{199841} \\
 \underline{\underline{169591}}
 \end{array}$$

$$\begin{array}{r}
 99921 \\
 \underline{99921} \\
 99921 \\
 \underline{199842} \\
 899289 \\
 \underline{899289} \\
 899289 \\
 \underline{169591} \\
 \underline{\underline{9984375832}} \text{ Proof}
 \end{array}$$

210023

221

Demand the Square Root of 9765432 & the Proof

$$\begin{array}{r} 9765432 \text{ (3124 Answer)} \\ 9 \\ \hline 61 \overline{) 76} \\ \underline{61} \\ 1554 \\ 1244 \\ \hline 31032 \\ 24976 \\ \hline \underline{6056} \end{array}$$

Remainder

Demand the Square Root of 67876578 & proof

$$\begin{array}{r} 67876578 \text{ (8238 Answer)} \\ 64 \\ \hline 162 \overline{) 387} \\ \underline{324} \\ 6365 \\ 4929 \\ \hline 16468 \overline{) 143678} \\ \underline{131744} \\ \hline \underline{11934} \end{array}$$

Remainder

Supposing a Company of Men were together in an ale house and they
 continue Drinking till the Breckoning comes to 60⁰/₄ How
 many were in Company and what must each man pay by an
 equal proportion — Demand and the Proof

$\begin{array}{r} \text{S D} \\ 6-0\frac{3}{4} \\ 12 \\ \hline 72 \\ \text{4} \\ \hline 289 \end{array}$	$\begin{array}{r} \text{Q)} \\ 289 \text{ (17 Answer man} \\ \underline{1} \\ 189 \\ \underline{189} \\ \text{''''} \end{array}$	$\begin{array}{r} 11\frac{3}{4} \\ \underline{11} \\ 17\text{''}0 \\ \underline{11} \\ 68\text{''}0 \\ \underline{11\frac{3}{4}} \\ 12 \sqrt{72\frac{3}{4}} \\ \text{S 60}\frac{3}{4} \text{ Proof} \end{array}$
--	--	--

Suppose 12544 Soldiers are to be put in rank and file
 in the front four of an equal square, Demand How
 many will be in front and how many Deep & the Proof

$\begin{array}{r} 12544 \text{ (112 Answer} \\ \underline{1} \\ 21 \overline{) 25} \\ \underline{21} \\ 22 \overline{) 44} \\ \underline{44} \\ \text{''''} \end{array}$	$\begin{array}{r} 112 \\ \underline{112} \\ 224 \\ \underline{112} \\ 112 \\ \underline{112} \\ 12544 \text{ Proof} \end{array}$
--	--

Demand the square Root of 925675 and the Proof

$\begin{array}{r} 925675 \text{ (962 Answer} \\ \underline{81} \\ 186 \overline{) 1156} \\ \underline{1116} \\ 1922 \overline{) 4075} \\ \underline{3844} \\ \text{231} \end{array}$	$\begin{array}{r} 962 \\ \underline{962} \\ 1924 \\ \underline{5772} \\ 8658 \\ \underline{231} \\ 925675 \text{ Proof} \end{array}$
--	--

