

$$\begin{array}{r}
 29 \\
 \hline
 2 \overline{) 841} \\
 \underline{4} \\
 49 \\
 \underline{4} \\
 0
 \end{array}$$

The diagram illustrates the long division process for finding the square root of 841. The divisor is 29, and the dividend is 841. The quotient is 29, and the remainder is 0. The steps are as follows:

- Divide 8 by 2, which gives 4. Write 4 above the 8.
- Multiply 4 by 2, which gives 8. Subtract 8 from 8, resulting in 0.
- Bring down the next digit, 4, to form 49.
- Divide 49 by 29, which gives 1. Write 1 above the 49.
- Multiply 1 by 29, which gives 29. Subtract 29 from 49, resulting in 20.
- Bring down the next digit, 1, to form 201.
- Divide 201 by 29, which gives 6. Write 6 above the 201.
- Multiply 6 by 29, which gives 174. Subtract 174 from 201, resulting in 27.
- Bring down the next digit, 1, to form 271.
- Divide 271 by 29, which gives 9. Write 9 above the 271.
- Multiply 9 by 29, which gives 261. Subtract 261 from 271, resulting in 10.
- Bring down the next digit, 1, to form 101.
- Divide 101 by 29, which gives 3. Write 3 above the 101.
- Multiply 3 by 29, which gives 87. Subtract 87 from 101, resulting in 14.
- Bring down the next digit, 1, to form 141.
- Divide 141 by 29, which gives 4. Write 4 above the 141.
- Multiply 4 by 29, which gives 116. Subtract 116 from 141, resulting in 25.
- Bring down the next digit, 1, to form 251.
- Divide 251 by 29, which gives 8. Write 8 above the 251.
- Multiply 8 by 29, which gives 232. Subtract 232 from 251, resulting in 19.
- Bring down the next digit, 1, to form 191.
- Divide 191 by 29, which gives 6. Write 6 above the 191.
- Multiply 6 by 29, which gives 174. Subtract 174 from 191, resulting in 17.
- Bring down the next digit, 1, to form 171.
- Divide 171 by 29, which gives 5. Write 5 above the 171.
- Multiply 5 by 29, which gives 145. Subtract 145 from 171, resulting in 26.
- Bring down the next digit, 1, to form 261.
- Divide 261 by 29, which gives 9. Write 9 above the 261.
- Multiply 9 by 29, which gives 261. Subtract 261 from 261, resulting in 0.

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$$\sqrt{841} = 29$$