Zeros in the Quotient

Find 816 ÷ 4.

Step 1: Compare the first digit of the dividend with the divisor. 8 > 4, so the first digit in the quotient will go in the hundreds place.

Divide the hundreds. Think 4 × ? = 8.

Write 2 in the hundreds place of the quotient. Multiply. 4 × 2 = 8

$$\begin{array}{r} 2 \\ 4\overline{)8\ 1} \\ -8\downarrow \\ \hline 0\ 1 \end{array}$$

Subtract. 8 − 8 = 0

Compare. 0 < 4

Bring down the tens.

Step 2: Compare. 1 < 4

You cannot divide the tens, so place 0 in the tens place of the quotient.

Bring down the ones.

$$\begin{array}{r} 2\ 0 \\ 4\overline{)8\ 1\ 6} \\ -8\downarrow \\ \hline 0\ 1\ 6 \end{array}$$

Step 3: Compare. 16 > 4

Divide the ones. Think 4 × ? = 16.

Write 4 in the ones place of the quotient.

Multiply. 4 × 4 = 16

Subtract. 16 − 16 = 0

Compare. 0 < 4

There are no more digits to bring down, so the problem is done.

$$\begin{array}{r} 2\ 0\ 4 \\ 4\overline{)8\ 1\ 6} \\ -8 \\ \hline 0\ 1\ 6 \\ -\ 1\ 6 \\ \hline 0 \end{array}$$

Step 4: Check by multiplying.
4 × 204 = 816

Find each quotient. Check your answers by multiplying.

1. 8)640

2. 3)322

3. 4)908

4. 15)225

5. 6)624

6. 6)965

7. Is 593 ÷ 6 a little less than 10, a little more than 10, a little less than 100, or a little more than 100? Explain.

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_____

Zeros in the Quotient

Find each quotient. Check your answers by multiplying.

1. 490 ÷ 7 = _____ **2.** 326 ÷ 3 = _____

3. 916 ÷ 3 = _____ **4.** 720 ÷ 2 = _____

5. 2)941   **6.** 9)982   **7.** 7)740   **8.** 5)703

9. If there are 505 seats in an auditorium divided equally into 5 sections, how many seats are in each section?   _____

10. A book company publishes 749 copies of a novel and distributes them to 7 bookstores. If each bookstore were to receive the same number of copies, how many copies would be sent to each store?   _____

11. In one year, Dolores and Tom's four children saved $420 by recycling cans. When they divided the money equally, how much money did each child receive?

   A $50   **B** $100   **C** $105   **D** $1,500

12. Writing To Explain Explain why estimating before you divide 624 ÷ 6 helps you place the first digit in the quotient.

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