

Lesson 13: Dividing Multi-Digit Numbers Using the Algorithm

Classwork

Example 1

Divide $70,072 \div 19$.

- a. Estimate:

- b. Create a table to show the multiples of 19.

Multiples of 19

- c. Use the algorithm to divide $70,072 \div 19$. Check your work.

$$\begin{array}{r} 1\ 9 \\ \hline 7\ 0\ 0\ 7\ 2 \end{array}$$

Example 2

Divide $14,175 \div 315$.

a. Estimate:

b. Use the algorithm to divide $14,175 \div 315$. Check your work.

Exercises 1–5

For each exercise,

- a. Estimate.
 - b. Divide using the algorithm, explaining your work using place value.
1. $484,692 \div 78$
 - a. Estimate:
 - b.
 2. $281,886 \div 33$
 - a. Estimate:
 - b.

3. $2,295,517 \div 37$

a. Estimate:

b.

4. $952,448 \div 112$

a. Estimate:

b.

5. $1,823,535 \div 245$

a. Estimate:

b.

Problem Set

Divide using the division algorithm.

1. $1,634 \div 19$

2. $2,450 \div 25$

3. $22,274 \div 37$

4. $21,361 \div 41$

5. $34,874 \div 53$

6. $50,902 \div 62$

7. $70,434 \div 78$

8. $91,047 \div 89$

9. $115,785 \div 93$

10. $207,968 \div 97$

11. $7,735 \div 119$

12. $21,948 \div 354$

13. $72,372 \div 111$

14. $74,152 \div 124$

15. $182,727 \div 257$

16. $396,256 \div 488$

17. $730,730 \div 715$

18. $1,434,342 \div 923$

19. $1,775,296 \div 32$

20. $1,144,932 \div 12$