

Division Quest

Use long division to solve whole-number problems.

GRADE 5 • 5.NR.2.2

5.NR.2.2 "Fluently divide multi-digit whole numbers (up to 4-digit dividends and 2-digit divisors no greater than 25) to solve practical problems."

NAME _____

DATE _____

DIVIDE STEP BY STEP

Start at the left and divide, multiply, subtract, and bring down each digit. If the divisor cannot go into a number, write 0 in the quotient before you bring down the next digit. Check your quotient by multiplying it by the divisor.

WORKED EXAMPLE

$$1,872 \div 18$$

1. 18 goes into 18 one time. Write 1.
2. Subtract 18 from 18. Bring down 7.
3. 18 goes into 7 zero times. Write 0, then bring down 2.
4. 18 goes into 72 four times. Write 4 and subtract 72 to get 0.

Answer: 104

PRACTICE 6 problems

1 $936 \div 12$

ANSWER _____

2 $1,248 \div 16$

ANSWER _____

3 $1,575 \div 21$

ANSWER _____

4 $2,304 \div 24$

ANSWER _____

5 $3,024 \div 18$

ANSWER _____

6 $4,200 \div 25$

ANSWER _____

APPLY IT Show your work

- 1** The game club has 1,728 trading cards. They pack the cards equally into 24 binders. How many cards go in each binder?

WORK SPACE

ANSWER _____

- 2** A robotics team has 2,275 screws. They put the same number of screws into 13 building kits. How many screws go in each kit?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A theater has 3,600 tickets for a student event. The tickets are shared equally among 24 classes. Then each class shares its tickets equally among 5 teams. How many tickets does each team get?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$936 \div 12$	78
2	$1,248 \div 16$	78
3	$1,575 \div 21$	75
4	$2,304 \div 24$	96
5	$3,024 \div 18$	168
6	$4,200 \div 25$	168

PART 2 • APPLY IT

1. **72 cards per binder** Divide 1,728 by 24. Each binder holds 72 cards.
2. **175 screws per kit** Divide 2,275 by 13. Each kit gets 175 screws.

CHALLENGE

30 tickets per team

Accept correct quotients shown with any valid long-division work. For the challenge, students may divide 3,600 by 24 and then divide the result by 5, or divide 3,600 by 120.