LESSON MAKER PRO

Divide and Decide

Use long division to solve number and real-world problems.

GRADE 6 · 6.NOS.B.2.c

6.NOS.B.2.c "Use a standard algorithm to divide."

NAME _____ DATE _____

LONG DIVISION STEPS

Start at the left. Divide, multiply, subtract, and bring down the next digit until you have used every digit. If the divisor does not fit in a place, write 0 in that quotient place. Any amount left after the last digit is the remainder.

WORKED EXAMPLE

Divide 1,764 by 14.

1. 14 goes into 17 once. Write 1, subtract 14, and bring down 6 to make 36.
2. 14 goes into 36 twice. Write 2, subtract 28, and bring down 4 to make 84.
3. 14 goes into 84 six times. Write 6 and subtract 84. Nothing is left.

Answer: 126

PRACTICE 6 problems

1 Divide 972 by 6.

ANSWER _____

2 Divide 1,248 by 12.

ANSWER _____

3 Divide 2,688 by 16.

ANSWER _____

4 Divide 4,725 by 25.

ANSWER _____

5 Divide 5,418 by 21.

ANSWER _____

6 Divide 8,736 by 28.

ANSWER _____

APPLY IT Show your work

1 A game shop has 3,744 trading cards. It puts the same number of cards into each of 24 boxes, with none left over. How many cards go in each box? Use long division.

WORK SPACE

ANSWER _____

2 At an arcade, a prize costs 18 tokens. You have 2,835 tokens. How many prizes can you get, and how many tokens will you have left? Use long division.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Divide 7,954 by 32. Give the quotient and remainder, then use multiplication to show that your answer is correct.

WORK SPACE AND ANSWER

ANSWER KEY

Divide and Decide

GRADE 6 · 6.NOS.B.2.c

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Divide 972 by 6.	**162**
2	Divide 1,248 by 12.	**104**
3	Divide 2,688 by 16.	**168**
4	Divide 4,725 by 25.	**189**
5	Divide 5,418 by 21.	**258**
6	Divide 8,736 by 28.	**312**

PART 2 · APPLY IT

1. **156 cards per box** Divide 3,744 by 24 to get 156.
2. **157 prizes and 9 tokens left** Divide 2,835 by 18 to get 157 remainder 9. The remainder is the number of tokens left.

CHALLENGE

248 remainder 18; 32 * 248 + 18 = 7,954.

Accept R18 or remainder 18 in the challenge. For the arcade problem, the remainder must be identified as tokens, not prizes.