LESSON MAKER PRO

Division Detective

Use place value to divide and check your answers.

GRADE 5 · 5.N.2.2

5.N.2.2 "Divide multi-digit numbers, by one- and two-digit divisors, based on knowledge of place value, including but not limited to standard algorithms."

NAME _____ DATE _____

DIVIDE IN PARTS

To divide by a one- or two-digit number, split the dividend into parts that are easy to divide. Add the partial quotients. Check by multiplying the divisor by your quotient, then adding any remainder.

WORKED EXAMPLE

936 / 18 = ____

1. 18 × 50 = 900, so 936 - 900 = 36.
2. 18 × 2 = 36, so 36 - 36 = 0.
3. 50 + 2 = 52.

Answer: 52

PRACTICE 6 problems

1 672 / 8 = ___

ANSWER _____

2 945 / 9 = ___

ANSWER _____

3 1,476 / 6 = ___

ANSWER _____

4 1,296 / 12 = ___

ANSWER _____

5 1,725 / 15 = ___

ANSWER _____

6 1,387 / 16 = ___. Write any remainder.

ANSWER _____

APPLY IT Show your work

1 A school game club shares 1,056 trading cards equally among 24 players. How many cards does each player get?

WORK SPACE

ANSWER _____

2 A group of friends has 1,090 arcade tickets. Each sticker costs 17 tickets. If they buy as many stickers as possible, how many stickers can they buy, and how many tickets will remain?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Find 2,184 / 21. Explain why the quotient has a zero in the tens place.

WORK SPACE AND ANSWER

ANSWER KEY

Division Detective

GRADE 5 · 5.N.2.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	672 / 8 = ___	**84**
2	945 / 9 = ___	**105**
3	1,476 / 6 = ___	**246**
4	1,296 / 12 = ___	**108**
5	1,725 / 15 = ___	**115**
6	1,387 / 16 = ___. Write any remainder.	**86 R 11**

PART 2 · APPLY IT

1. **44 cards** 1,056 / 24 = 44. Each player gets 44 cards.
2. **64 stickers and 2 tickets left** 17 × 64 = 1,088. They can buy 64 stickers and have 1,090 - 1,088 = 2 tickets left.

CHALLENGE

The quotient is 104 because 21 × 104 = 2,184. After 100 groups use 2,100, the remaining 84 makes only 4 more groups, so there are zero tens.

For practice problem 6, accept 86 remainder 11. For the challenge, accept any correct place-value explanation for the zero in the tens place.