LESSON MAKER PRO

Big Chunk Division

Use partial quotients to solve each problem.

GRADE 5 · 5.NOS.B.5.b

5.NOS.B.5.b "Use partial quotients efficiently to divide."

NAME _____ DATE _____

DIVIDE IN CHUNKS

Subtract easy multiples of the divisor from the number you are dividing. Add the partial quotients to find the answer. If the amount left is smaller than the divisor, it is the remainder.

WORKED EXAMPLE

Divide 768 by 16 using partial quotients.

1. Subtract 40 groups of 16: 768 - 640 = 128.
2. Subtract 8 more groups of 16: 128 - 128 = 0.
3. Add the partial quotients: 40 + 8 = 48.

Answer: 768 ÷ 16 = 48

PRACTICE 6 problems

1 Use partial quotients to divide 672 ÷ 12.

ANSWER _____

2 Use partial quotients to divide 945 ÷ 15.

ANSWER _____

3 Use partial quotients to divide 858 ÷ 13.

ANSWER _____

4 Use partial quotients to divide 1,344 ÷ 21.

ANSWER _____

5 Use partial quotients to divide 1,568 ÷ 28.

ANSWER _____

6 Use partial quotients to divide 2,475 ÷ 45.

ANSWER _____

APPLY IT Show your work

1 A school game club packs 1,296 trading cards equally into 24 prize packs. How many cards go in each pack? Use partial quotients.

WORK SPACE

ANSWER _____

2 A student team splits 1,512 seconds of video footage into 36 clips of equal length. How many seconds long is each clip? Use partial quotients.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A comic shop has 2,386 stickers. Each bundle needs 32 stickers. Use partial quotients to find how many full bundles the shop can make and how many stickers will remain. Explain why it cannot make another full bundle.

WORK SPACE AND ANSWER

ANSWER KEY

Big Chunk Division

GRADE 5 · 5.NOS.B.5.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use partial quotients to divide 672 ÷ 12.	**56**
2	Use partial quotients to divide 945 ÷ 15.	**63**
3	Use partial quotients to divide 858 ÷ 13.	**66**
4	Use partial quotients to divide 1,344 ÷ 21.	**64**
5	Use partial quotients to divide 1,568 ÷ 28.	**56**
6	Use partial quotients to divide 2,475 ÷ 45.	**55**

PART 2 · APPLY IT

1. **54 cards per pack** Subtract 1,200 for 50 groups of 24, then 96 for 4 more groups. Add 50 + 4 = 54.
2. **42 seconds per clip** Subtract 1,440 for 40 groups of 36, then 72 for 2 more groups. Add 40 + 2 = 42.

CHALLENGE

The shop can make 74 full bundles, with 18 stickers left. Since 18 is less than 32, it cannot make another full bundle.

Accept any correct partial-quotients chunks. For the challenge, 70 groups of 32 leave 146 stickers, and 4 more groups leave 18.