LESSON MAKER PRO

Division Model Mission

Use equal groups to divide large whole numbers.

GRADE 4 · 4.NBT.B.6

CCSS.Math.Content.4.NBT.B.6 "Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division..."

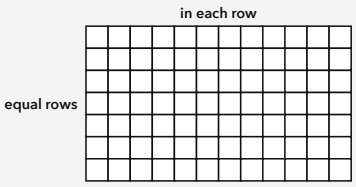
NAME _____ DATE _____

DIVIDE WITH GROUPS

Use place value to break a dividend into parts that are easy to divide. An array can show equal groups, and any remainder must be less than the divisor. Check your quotient by multiplying the divisor by the quotient and adding the remainder.

WORKED EXAMPLE

Use the array. It shows 7 equal rows. Find the quotient.

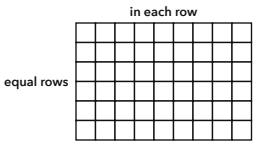


1. 84 = 70 + 14.
2. 70 / 7 = 10 and 14 / 7 = 2.
3. 10 + 2 = 12.

Answer: 84 / 7 = 12

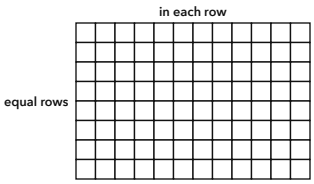
PRACTICE 6 problems

1 Use the array. It shows 6 equal rows. Write the division equation and quotient.



ANSWER _____

2 Use the array. It shows 8 equal rows. Write the division equation and quotient.



ANSWER _____

3 Find 735 / 5.

ANSWER _____

4 Find 1,248 / 6.

ANSWER _____

5 Find 963 / 4. Write the remainder.

ANSWER _____

6 Find 2,019 / 7. Write the remainder.

ANSWER _____

APPLY IT Show your work

1 A student council has 1,365 glow bracelets for a school dance. They put 6 bracelets in each prize bag. How many full prize bags can they make, and how many bracelets will be left?

WORK SPACE

ANSWER _____

2 The robotics club has 2,548 small parts to place in 9 labeled storage bins. If each full bin gets the same number of parts, how many parts go in each full bin, and how many parts are left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Use partial quotients to find 3,876 / 8. Write equations for your partial quotients. Then explain why your remainder is reasonable.

WORK SPACE AND ANSWER

ANSWER KEY

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GRADE 4 · 4.NBT.B.6

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use the array. It shows 6 equal rows. Write the division equation and quotient.	**54 / 6 = 9**
2	Use the array. It shows 8 equal rows. Write the division equation and quotient.	**96 / 8 = 12**
3	Find 735 / 5.	**147**
4	Find 1,248 / 6.	**208**
5	Find 963 / 4. Write the remainder.	**240 R3**
6	Find 2,019 / 7. Write the remainder.	**288 R3**

PART 2 · APPLY IT

1. **227 full prize bags, 3 bracelets left** Divide 1,365 by 6. Since 6 x 227 = 1,362, 3 bracelets remain.
2. **283 parts in each full bin, 1 part left** Divide 2,548 by 9. Since 9 x 283 = 2,547, 1 part remains.

CHALLENGE

3,876 / 8 = 484 R4. Possible equations: 8 x 400 = 3,200; 8 x 80 = 640; 8 x 4 = 32. Since 3,200 + 640 + 32 = 3,872, the remainder is 4. It is reasonable because 4 is less than 8.

Accept equivalent equations, area models, arrays, or partial-quotient strategies that give the listed quotient and remainder. For remainder problems, accept forms such as 240 R3 or 240 remainder 3.