LESSON MAKER PRO

Quotient Quest

Use place value to divide.

GRADE 5 · MT.5.NBT.6

MT.5.NBT.6 "Flexibly, accurately, and efficiently find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors using strategies based on place value, the properties of operations..."

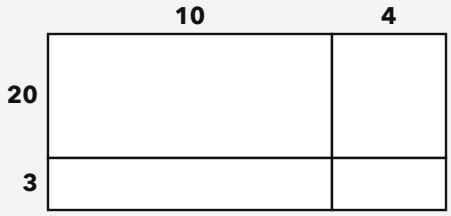
NAME _____ DATE _____

SPLIT AND CHECK

Split a dividend into easy multiples of the divisor. Add the partial quotients to find the answer, then multiply to check it.

WORKED EXAMPLE

Use the area model to find 322 / 14.



1. 14 x 20 = 280
2. 14 x 3 = 42
3. 280 + 42 = 322, so 20 + 3 = 23.

Answer: 23

PRACTICE 4 problems

1 672 / 24 = ___

ANSWER _____

2 936 / 36 = ___

ANSWER _____

3 1,188 / 44 = ___

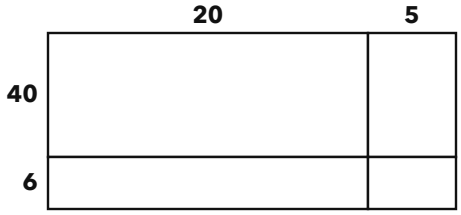
ANSWER _____

4 1,728 / 32 = ___

ANSWER _____

APPLY IT Show your work

1 A card club has 1,150 cards. Use the model to find how many binder pages it can fill if each page holds 25 cards.



ANSWER _____

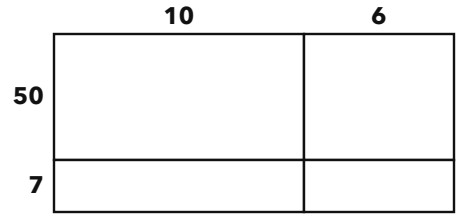
2 A craft club has 1,584 beads. Each bracelet kit gets 24 beads. How many kits can the club make?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Use the model to explain why 912 / 16 = 57.



WORK SPACE AND ANSWER

ANSWER KEY

Quotient Quest

GRADE 5 · MT.5.NBT.6

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	672 / 24 = ___	**28**
2	936 / 36 = ___	**26**
3	1,188 / 44 = ___	**27**
4	1,728 / 32 = ___	**54**

PART 2 · APPLY IT

1. **46 pages** The model shows 25 x 40 = 1,000 and 25 x 6 = 150. Since 1,000 + 150 = 1,150, the club fills 40 + 6 = 46 pages.
2. **66 kits** 24 x 60 = 1,440 and 24 x 6 = 144. Together, those make 1,584 beads, so the club can make 66 kits.

CHALLENGE

16 x 50 = 800 and 16 x 7 = 112. Since 800 + 112 = 912, 912 / 16 = 57.

Accept any correct place-value split or multiplication check. For the challenge, the explanation must show that 16 x 57 = 912.