LESSON MAKER PRO

Number Quest

Estimate, solve, and explain whole-number stories.

GRADE 5 · 5.CE.1

5.CE.1 "The student will estimate, represent, solve, and justify solutions to single-step and multistep contextual problems using addition, subtraction, multiplication, and division with whole numbers. Estimate the sum, difference, product..."

NAME _____ DATE _____

PLAN, SOLVE, CHECK

Estimate first by rounding numbers to a place that makes the math easier. Then use an equation or a standard algorithm to find the exact answer. In division, decide whether a remainder means items are left over or another group is needed.

WORKED EXAMPLE

Each of 18 art tables needs 24 paintbrushes. Estimate and find the exact number of paintbrushes needed.

1. Round 18 to 20 and 24 to 20: 20 x 20 = 400.
2. Break apart 24: 18 x 20 = 360 and 18 x 4 = 72.
3. Add: 360 + 72 = 432.

Answer: Estimate: about 400 paintbrushes. Exact answer: 432 paintbrushes.

PRACTICE 6 problems

1 Estimate 347 + 286 by rounding each number to the nearest hundred.

ANSWER _____

2 Find 4,563 - 1,728.

ANSWER _____

3 Find 37 x 126.

ANSWER _____

4 Find 936 / 26.

ANSWER _____

5 Find 1,275 / 39. Write the quotient and remainder.

ANSWER _____

6 A sticker shop has 6 packs with 145 stickers in each pack. It gives away 238 stickers. Write an equation and find how many stickers are left.

ANSWER _____

APPLY IT Show your work

1 The school library received 28 boxes of donated books. Each box has 34 books. After 175 books are set aside for repair, how many books can go on the shelves? Estimate first by rounding each number to the nearest ten. Then write an equation and solve exactly.

WORK SPACE

ANSWER _____

2 A gaming club needs to display all 1,438 trading cards. Each display case holds 32 cards. Estimate by rounding the number of cards and the number per case to the nearest ten. Then find how many display cases are needed.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A concert booth has 3,358 glow bracelets. It puts 46 bracelets in each prize bag. A worker says the booth can fill 72 bags with no bracelets left. Is the worker correct? Explain with equations.

WORK SPACE AND ANSWER

ANSWER KEY # Number Quest

GRADE 5 · 5.CE.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Estimate 347 + 286 by rounding each number to the nearest hundred.	**600**
2	Find 4,563 - 1,728.	**2,835**
3	Find 37 x 126.	**4,662**
4	Find 936 / 26.	**36**
5	Find 1,275 / 39. Write the quotient and remainder.	**32 R 27**
6	A sticker shop has 6 packs with 145 stickers in each pack. It gives away 238 stickers. Write an equation and find how many stickers are left.	**6 x 145 - 238 = 632 stickers**

PART 2 · APPLY IT

1. **Estimate: 720 books. Exact answer: 777 books.** Round to get 30 x 30 - 180 = 720. For the exact answer, 28 x 34 = 952, and 952 - 175 = 777.
2. **Estimate: about 48 cases. Exact answer: 45 cases.** The estimate is 1,440 / 30 = 48. Exactly, 1,438 / 32 = 44 R 30, so 45 cases are needed to hold the remaining 30 cards.

CHALLENGE

No. 46 x 72 = 3,312, and 3,358 - 3,312 = 46. The booth can fill 73 bags with no bracelets left.

Accept correct equations and standard-algorithm work. For estimates, accept 600 in Practice 1, 720 in Apply 1, and about 48 cases in Apply 2 when the stated rounding is used; require 45 cases because the remainder needs another case.