



Name _____

Problem-Solving Skill

Reasonable Answers

R 4-3

When you finish solving a problem, check back to make sure your answer is reasonable. Is it close to your estimate? Does it answer the question?

Here are some examples of reasonable and unreasonable answers.

Reasonable answers

$$1,230 \div 6 = 205$$

$$\text{Estimate: } 1,200 \div 6 = 200$$

Close to the estimate. ✓

24 books per crate.

248 books

Will all the crates be full? No.

Answers the question. ✓

Unreasonable answers

$$1,230 \div 6 = \cancel{7,380}$$

The quotient should be *less than* the dividend.

24 books per crate.

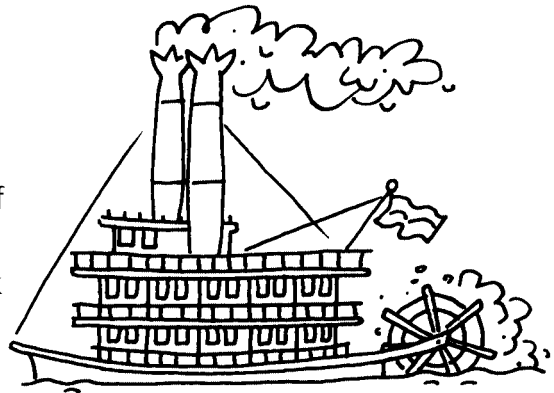
248 books

How many left over? ~~20~~ crates

The question asks how many *left over*.

Use the information in the paragraph to answer the questions.

The captain knows that at any time about $\frac{1}{2}$ of the passengers on his riverboat cruise will be sitting sunning themselves on the upper deck. About $\frac{1}{4}$ of the passengers will be standing at the railings. About 1 passenger in 10 will be feeling a little sick on the lower deck. The rest will be wandering around looking at the boat itself. Today he has 220 passengers on his riverboat cruise.



- About how many will be sunning themselves? _____
- About how many will be at the railings? _____
- About how many passengers can he expect to feel sick? _____
- Is it reasonable to say that about 165 passengers will be walking around looking at the boat? Explain your answer.

- Is it reasonable to have about 120 deck chairs set up for passengers who want to sunbathe? Explain.
