# MY Momework 

Lesson 8
Problem Solving: Determine Reasonable Answers

Ms. Montoya makes $2 \frac{3}{4}$ pounds of goat cheese in the morning. In the afternoon, she makes $1 \frac{1}{5}$ pounds of goat cheese. Is 3 pounds, 4 pounds, or 5 pounds the most reasonable estimate for how much goat cheese Ms. Montoya makes in one day?

## 1 <br> Understand

What facts do you know?
Ms. Montoya makes $2 \frac{3}{4}$ pounds and $1 \frac{1}{5}$ pounds of goat cheese in one day.
What do you need to find?
a reasonable estimate of how much goat cheese she makes in one day

## 2 Plan

Use estimation to find a reasonable answer.

## 3) Solve

Round each amount of cheese to the nearest whole number.
Morning
Afternoon
$2 \frac{3}{4} \rightarrow 3$
$1 \frac{1}{5} \rightarrow 1$

In one day, she makes about $3+1$, or 4 pounds of goat cheese.
So, Ms. Montoya makes about 4 pounds of goat cheese in one day.

## 4 Check

Is my answer reasonable?
Subtract the rounded amount she made in the morning from the estimated total.
$4-3=1$
So, the answer is reasonable.

## Problem Solving

## PRACTICE 1 Check for Reasonableness Determine a reasonable answer to solve each problem.

1. Alyssa needs $7 \frac{5}{8}$ inches of ribbon for one project and $4 \frac{7}{8}$ inches of ribbon for another project. If she has 11 inches of ribbon, will she have enough to complete both projects? Explain.
2. Josiah has a piece of wood that measures $10 \frac{1}{8}$ feet. He wants to make 5 shelves. If each shelf is $1 \frac{3}{4}$ feet long, does he have enough to make 5 shelves? Explain.
3. After school, Philipe spent $1 \frac{3}{4}$ hours at baseball practice, $2 \frac{1}{4}$ hours on homework, and $\frac{1}{4}$ hour getting ready for bed. Which is the most reasonable estimate for how long he spent on his activities: 3 hours, 4 hours, or 5 hours? Explain.
4. Kimane and a friend picked apples. Kimane picked $4 \frac{2}{3}$ pounds and his friend picked $5 \frac{5}{6}$ pounds. Which is the most reasonable estimate for how many pounds they picked altogether: 9 pounds, 11 pounds, or 12 pounds?
