# Ways to Solve Problems and Show Solutions

Let's solve problems about spending a day at the fair and think about how to best show our solutions.

Warm-up

## Number Talk: Divide by 8

Find the value of each expression mentally.

- $80 \div 8$
- $72 \div 8$
- $96 \div 8$
- $96 \div 4$

Activity 1

## A Day at the Fair

You spent a day at the fair. Solve 4 problems about your day and create a poster to show your reasoning and solutions.

1. You arrived at the fair!

   Entry to the fair is $9 a person. You went there with 6 other people. How much did it cost your group to enter the fair?

2. How did you start your day? (Choose 1.)

   You arrived at the giant pumpkin weigh-off at 11:12 a.m. and left at 12:25 p.m. How long were you there?

   You spent 48 minutes at the carnival and left at 12:10 p.m. What time did you get to the carnival?

3. What was next? (Choose 1.)

You visited a barn with 7 sheep. Together, the sheep are given 91 liters of water a day. Each sheep is given the same amount. How much water does each sheep get each day?

You visited a life-size sculpture of a cow made of butter. The butter cow weighs 273 kilograms, which is 277 kilograms less than the actual cow. How much does the actual cow weigh?

4. Before you went home, you played some games.

At the balloon pop game, there were 72 balloons arranged in 9 equal rows. How many balloons were in each row?

Activity 2

## Gallery Walk: A Day at the Fair

As you visit the posters with your partner:

1. Look for a problem that was solved using a strategy that is different from yours. What made it different? Describe the strategy.

2. Look for ways that your classmates made their thinking and their math work clear to you. Describe at least 3 things they did or showed on the posters.

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## Section D Summary

We solved many kinds of problems about time, weight, and the volume of liquids and containers. We did so using addition, subtraction, multiplication, and division, as well as different reasoning strategies.

**Problem:** Clare spent 48 minutes at the carnival. She left the carnival at 12:10 p.m. What time did she get to the carnival?

$$11{:}22 \xleftarrow{-8} 11{:}30 \xleftarrow{-30} 12{:}00 \xleftarrow{-10} 12{:}10$$

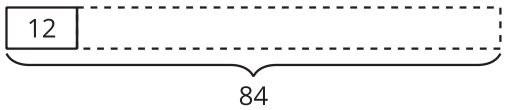
**Solution:** Clare got to the carnival at 11:22 a.m.

**Problem:** A cow made of butter weighs 273 kilograms. That is 277 kilograms less than the actual cow. How much does the actual cow weigh?

$$\begin{array}{r} {\scriptstyle 1\ 1}\phantom{0} \\ 2\ 7\ 3 \\ +\ 2\ 7\ 7 \\ \hline 5\ 5\ 0 \end{array}$$

**Solution:** The cow weighs 550 kilograms.

**Problem:** A grower used 84 liters to water their pumpkin seedlings. Each seedling got 12 liters. How many seedlings were there?




**Solution:** There were 7 seedlings.