Unit 9, Lesson 8

Solve Problems with Multiplication and Division

Let's make sense of situations and solve word problems.

Warm-up

Number Talk: Divide by 8

Find the value of each expression mentally.

- $848 \div 8$

- $4{,}848 \div 8$

- $4{,}852 \div 8$

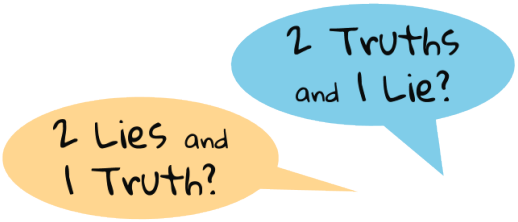
- $5{,}848 \div 8$

Activity 1

Two Truths and a Lie, or Two Lies and a Truth?

Here are 3 situations. Which situations are true? Which situations are not true?

Show how you know.



- Situation A: A high-rise building has 53 stories. The first floor is 17 feet tall. All other stories are each 11 feet tall. The building is 589 feet tall.

- Situation B: A window washer has 600 seconds to wash 17 windows of a building. It takes 54 seconds to wash each window. The washer finishes washing all the windows and has 11 seconds to spare.

- Situation C: There are 11 students who set a goal to raise at least $600 for charity. Each student raises $17 each day. After 3 days of fundraising, the group needs $54 to meet their goal.

Activity 2

Buses for a Field Trip

A school is taking everyone on a field trip. It needs buses to transport 375 people.

Bus Company A has small buses with 27 seats in each.

Bus Company B has large buses with 48 seats in each.



1. What is the least number of buses that will be needed if the school goes with:
    - Bus Company A? Show your reasoning.

    - Bus Company B? Show your reasoning.

2. Which bus company should the school choose? Explain your reasoning.

3. Bus Company C has large buses that can take up to 72 passengers.

   Diego says, “If the school chooses Bus Company C, it will need only 6 buses, but the buses will have more empty seats.”

   Do you agree? Explain your reasoning.