3.MD.1, 3.MD.2

MY Homework

Lesson 7

Problem Solving: Work Backward

Homework Helper 🚰

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Miranda will leave at 7:20 P.M. for a sleepover. She wants to be ready 5 minutes early. Miranda needs 45 minutes to do her chores, 20 minutes to shower, and 10 minutes to get dressed. What is the latest time Miranda can begin her chores?

Understand What facts do you know?

the time Miranda will leave for a sleepover how long it takes Miranda to complete each task Miranda wants to be ready 5 minutes early.

What do you need to find?

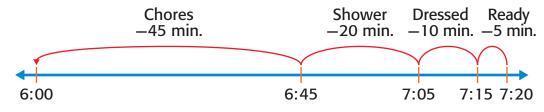
the latest time Miranda can begin her chores

🙎 Plan

I will work backward to solve the problem.

3 Solve

Use a number line. Mark everything in reverse order.



Miranda needs to start getting ready by 6:00 р.м.

4 Check

Does the answer make sense?

6:00 P.M. + 80 minutes = 7:20 P.M. So, the answer is correct.



Solve each problem by working backward.

- Selma finished her shift at work at 5:40 P.M. She had been working for 4 hours and 20 minutes. What time did Selma begin her shift?
- 2. Riko has 3 kilograms of potatoes left. She sold 8 kilograms at the farmers' market. She gave half that amount away to neighbors. How many kilograms of potatoes did Riko have to start with?
- 3. Noah earned \$24 last week by pet sitting. He worked 1 hour on Friday and 3 hours on Wednesday. He worked the most hours on Monday. Noah earns \$3 per hour. How many hours did he work on Monday?
- 4. PRACTICE BE Precise It took Blake
 20 minutes to walk home from school. He spent
 35 minutes doing homework. Then Blake played
 basketball for 1 hour and 10 minutes. Now it is
 5:45 P.M. and time for Blake to eat dinner. What
 time did he leave the school?
- **5.** Ms. Hirose filled a bucket with water. She used 3 liters of water to rinse her front porch. She used 2 liters of water to fill the bird bath. There are 3 liters of water left in the bucket. How much water did Ms. Hirose have to begin with?

