

# 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?

### 1 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?

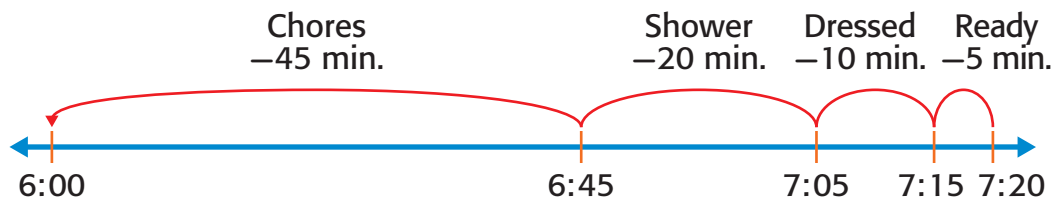
the latest time Miranda can begin her chores

### 2 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 P.M.

### 4 Check

#### Does the answer make sense?

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



# Problem Solving

Solve each problem by working backward.

1. 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?

**1:20 P.M.**

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?

**15 kilograms**

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 hours**

4. **Mathematical PRACTICE 6** **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?

**3:40 P.M.**

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?

**8 liters**

My Work!