

3rd Grade Math: Subtracting Hours and Minutes

What Are Hours and Minutes?

In 3rd grade, students learn to subtract **hours** and **minutes** to find out how much time has passed or how much time is left. Sometimes, subtraction involves **regrouping**, especially when you need to subtract more minutes than you have.

Steps for Subtracting Hours and Minutes

1. **Subtract the minutes.**
 - If the top number of minutes is smaller than the bottom number, **regroup** by borrowing 1 hour and converting it to 60 minutes.
2. **Subtract the hours.**
3. **Combine the hours and minutes** to get the total time.

Example 1: Subtracting Hours and Minutes Without Regrouping

Problem:

You spend 2 hours and 45 minutes at the park. You leave the park after 1 hour and 20 minutes. How much longer did you stay at the park?

Solution:

- Subtract the minutes:

$$45 \text{ minutes} - 20 \text{ minutes} = 25 \text{ minutes}$$

- Subtract the hours:

$$2 \text{ hours} - 1 \text{ hour} = 1 \text{ hour}$$

- The total time left is **1 hour and 25 minutes**.

Example 2: Subtracting Hours and Minutes With Regrouping

Problem:

You start watching a movie at 6:30 p.m., and it ends at 8:10 p.m. How long did the movie last?

Solution:

- First, **subtract the minutes:**
- You can't subtract 30 minutes from 10 minutes, so you need to **regroup**.
- Take 1 hour from 8:00 p.m., which leaves you with 7 hours, and add 60 minutes to 10 minutes:

$$60 + 10 = 70 \text{ minutes}$$

Now subtract the minutes:

$$70 \text{ minutes} - 30 \text{ minutes} = 40 \text{ minutes}$$

- **Subtract the hours:**

$$7 \text{ hours} - 6 \text{ hours} = 1 \text{ hour}$$

- The total time the movie lasted is **1 hour and 40 minutes**.

Practice Problem: Subtracting Hours and Minutes

Problem:

You finish your homework at 5:45 p.m., and you started at 4:20 p.m. How much time did you spend doing homework?

Solution:

- **Subtract the minutes:**
- You can't subtract 45 minutes from 20 minutes, so regroup:

$$60 + 20 = 80 \text{ minutes}$$

Now subtract the minutes:

$$80 \text{ minutes} - 45 \text{ minutes} = 35 \text{ minutes}$$

- **Subtract the hours:**

$$4 \text{ hours} - 3 \text{ hours} = 1 \text{ hour}$$

- The total time you spent on homework is **1 hour and 25 minutes**.

Conclusion:

- When subtracting hours and minutes, **regroup** if needed by borrowing 1 hour and converting it to 60 minutes.
- This skill is useful for figuring out how much time has passed or how much time is left for activities. With practice, subtracting hours and minutes will become much easier!