

3rd Grade Math: Elapsed Time

What Is Elapsed Time?

Elapsed time is the amount of time that passes between a **start time** and an **end time**. In 3rd grade, students learn to calculate how much time has passed or how much time remains using both **analog** and **digital clocks**.

Steps for Finding Elapsed Time

1. **Start with the hours:** Subtract the starting hour from the ending hour.
2. **Subtract the minutes:** Subtract the starting minutes from the ending minutes.
 - If the minutes in the start time are **greater** than the minutes in the end time, you will need to **regroup** by borrowing 1 hour (which is 60 minutes).
3. **Add the total hours and minutes** to find the elapsed time.

Example 1: Finding Elapsed Time Without Regrouping

Problem:

You start playing a game at 2:00 p.m. and finish at 4:30 p.m. How much time passed?

Solution:

- **Step 1:** Subtract the hours:

$$4 \text{ hours} - 2 \text{ hours} = 2 \text{ hours}$$

- **Step 2:** Subtract the minutes:

$$30 \text{ minutes} - 00 \text{ minutes} = 30 \text{ minutes}$$

- The total elapsed time is **2 hours and 30 minutes**.

Example 2: Finding Elapsed Time With Regrouping

Problem:

You start your homework at 3:45 p.m. and finish at 5:15 p.m. How much time passed?

Solution:

- **Step 1:** Subtract the hours:

$$5 \text{ hours} - 3 \text{ hours} = 2 \text{ hours}$$

- **Step 2:** Subtract the minutes: You cannot subtract 45 minutes from 15 minutes, so **regroup**: Take 1 hour from the 2 hours (leaving you with 1 hour), and convert it to 60 minutes:

$$60 + 15 = 75 \text{ minutes}$$

Now subtract:

$$75 \text{ minutes} - 45 \text{ minutes} = 30 \text{ minutes}$$

- The total elapsed time is **1 hour and 30 minutes**.

Example 3: Finding Elapsed Time in Real Life

Problem:

You get to the park at 1:20 p.m., and you leave at 3:05 p.m. How much time did you spend at the park?

Solution:

- **Step 1:** Subtract the hours:

$$3 \text{ hours} - 1 \text{ hour} = 2 \text{ hours}$$

- **Step 2:** Subtract the minutes: You cannot subtract 20 minutes from 5 minutes, so **regroup** by taking 1 hour from the 2 hours and converting it into 60 minutes:

$$60 + 5 = 65 \text{ minutes}$$

Now subtract:

$$65 \text{ minutes} - 20 \text{ minutes} = 45 \text{ minutes}$$

- The total elapsed time is **1 hour and 45 minutes**.

Conclusion:

- **Elapsed time** is the difference between a start time and an end time.

- Use the **regrouping** method when the minutes in the start time are greater than the minutes in the end time.
- This skill is helpful for tracking time in everyday life, like knowing how long an activity takes or how much time you have left for a task. Keep practicing with real-world examples to become confident in finding elapsed time!