Dora and her brother Kyle spent 1 hour and 35 minutes doing yard work. Then they stopped for lunch at 1:20 P.M. At what time did they start doing yard work?

Use the graphic organizer to help you solve the problem.

**What do I need to find?**
I need to find the time that Dora and Kyle
___________________________________________.

**What information do I need to use?**
I need to use the

__________________________

and the time that they

___________________________.

**How will I use the information?**
I can draw a time line to help me count backward and find the

___________________________.

**Solve the Problem**
I draw a time line that shows the end time 1:20 P.M. Next, I count backward 1 hour and then 5 minutes at a time until I have 35 minutes.

So, Dora and her brother Kyle started doing yard work at _____________.

1. What if Dora and Kyle spent 50 minutes doing yard work and they stopped for lunch at 12:30 P.M.? What time would they have started doing yard work?

__________________________________________
Try Another Problem

Ben started riding his bike at 10:05 A.M. He stopped 23 minutes later when his friend Robbie asked him to play kickball. At what time did Ben stop riding his bike?

<table>
<thead>
<tr>
<th>Read the Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do I need to find?</td>
</tr>
</tbody>
</table>

Solve the Problem

2. How did your diagram help you solve the problem?

Math Talk

Describe another way you could find the time an activity started or ended given the elapsed time and either the start or end time.
1. Evelyn has dance class every Saturday. It lasts 1 hour and 15 minutes and is over at 12:45 P.M. At what time does Evelyn’s dance class begin?

**First**, write the problem you need to solve.

**Next**, draw a time line to show the end time and the elapsed time.

**Finally**, find the start time.

Evelyn’s dance class begins at __________ .

2. **THINK SMARTER** What if Evelyn’s dance class started at 11:00 A.M. and lasted 1 hour and 25 minutes? At what time would her class end? Describe how this problem is different from Problem 1.

3. Beth got on the bus at 8:06 A.M. Thirty-five minutes later, she arrived at school. At what time did Beth arrive at school?

4. Lyle went fishing for 1 hour and 30 minutes until he ran out of bait at 6:40 P.M. At what time did Lyle start fishing?
5. Mike and Jed went skiing at 10:30 A.M. They skied for 1 hour and 55 minutes before stopping for lunch. At what time did Mike and Jed stop for lunch?

6. Mike can run a mile in 12 minutes. He starts his run at 11:30 A.M. and runs 4 miles. What time does Mike finish his run?

7. Communicate Explain how you can use a diagram to determine the start time when the end time is 9:00 A.M. and the elapsed time is 26 minutes. What is the start time?

8. Bethany finished her math homework at 4:20 P.M. She did 25 multiplication problems in all. If each problem took her 3 minutes to do, at what time did Bethany start her math homework?

9. Vincent began his weekly chores on Saturday morning at 11:20 A.M. He finished 1 hour and 10 minutes later. Draw a time line to show the end time.

Vincent finished his chores at __________ P.M.
Name ____________________________________________

Problem Solving • Elapsed Time

Read each problem and solve.

1. Molly started her piano lesson at 3:45 P.M. The lesson lasted 20 minutes. What time did the piano lesson end?

   **Think:** What do I need to find?
   How can I draw a diagram to help?

   

2. Brendan spent 24 minutes playing a computer game. He stopped playing at 3:55 P.M and went outside to ride his bike. What time did he start playing the computer game?

   

3. Aimee’s karate class lasts 1 hour and 15 minutes and is over at 5:00 P.M. What time does Aimee’s karate class start?

   

4. Mr. Giarmo left for work at 7:15 A.M. Twenty-five minutes later, he arrived at his work. What time did Mr. Giarmo arrive at his work?

   

5. **WRITE Math** Explain why it is important to know if a time is in the A.M. or in the P.M. when figuring out how much time has elapsed.

   

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Lesson Check (4.MD.A.2)

1. Bobbie went snowboarding with friends at 10:10 A.M. They snowboarded for 1 hour and 43 minutes, and then stopped to eat lunch. What time did they stop for lunch?

2. The Cain family drove for 1 hour and 15 minutes and arrived at their camping spot at 3:44 P.M. What time did the Cain family start driving?

Spiral Review (4.NF.B.4b, 4.NF.C.5, 4.MD.A.1, 4.MD.A.2)

3. A praying mantis can grow up to 15 centimeters long. How long is this in millimeters?

4. Thom’s minestrone soup recipe makes 3 liters of soup. How many milliliters of soup is this?

5. Stewart walks $\frac{2}{3}$ mile each day. List three multiples of $\frac{2}{3}$.

6. Angelica colored in 0.60 of the squares on her grid. Write 0.60 as tenths in fraction form.