

**Lesson  
5**

Solve word problems involving time intervals within 1 hour by adding and subtracting on the number line.

**Fluency Practice: Telling Time**

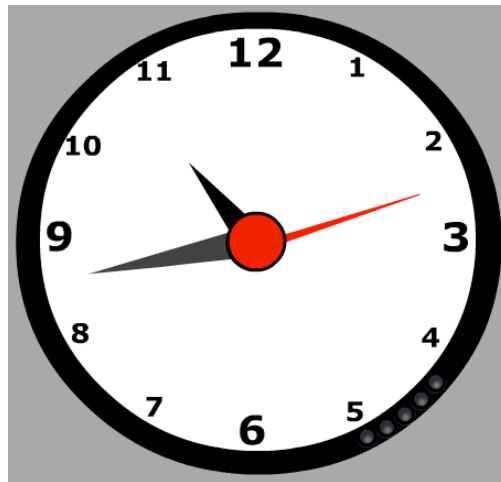


**Group Counting**

sevens to 56

eights to 64

nines to 72



**Minute Counting**

6 minutes to 1 hour, naming the half hour and 1 hour intervals

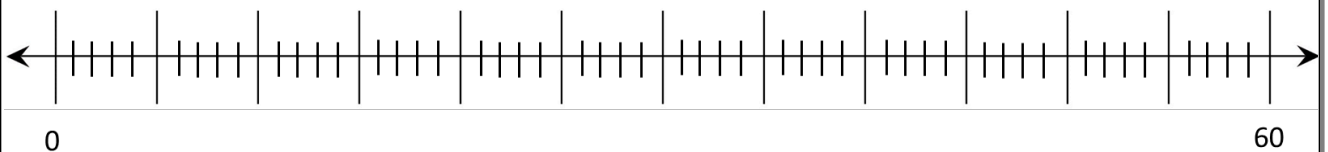
3 minutes, to 30 minutes, and naming the quarter hour and half hour intervals.

9 minutes, to 45 minutes, naming the quarter hours and half hour intervals.

10 minutes, to 1 hour

Lesson  
5**Application Problem**

Carlos gets to class at 9:08 a.m. He has to write down homework assignments and complete morning work before math begins at 9:30 a.m. How many minutes does Carlos have to complete his tasks before math begins?



\_\_\_\_\_ minutes + \_\_\_\_\_ minutes = \_\_\_\_\_ minutes

Carlos has \_\_\_\_\_ minutes to complete his tasks.

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## Concept Development

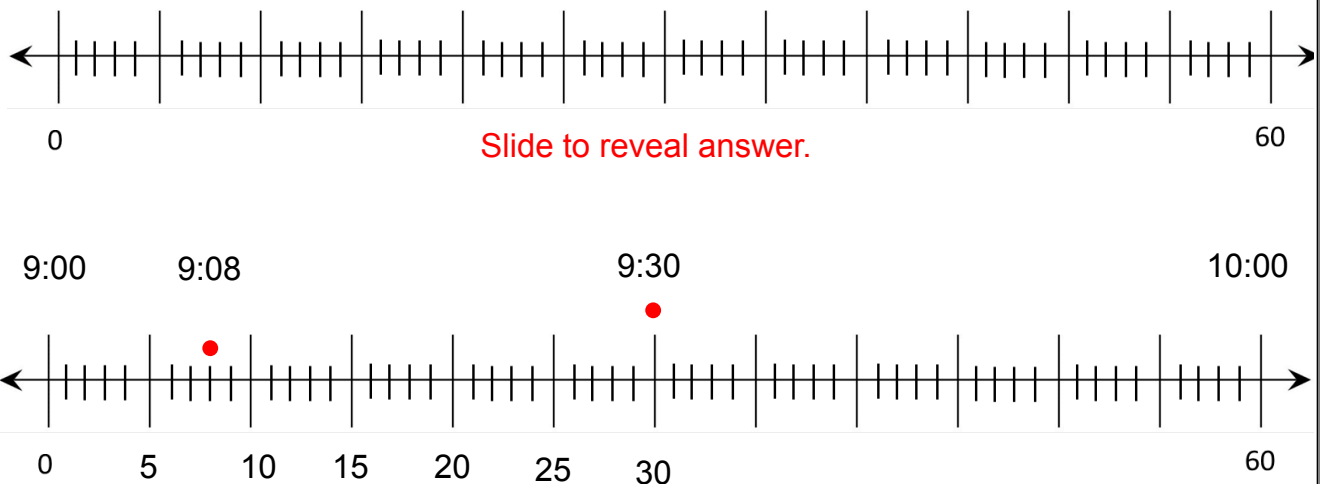
Number line templates needed.

**Part 1:** Count forward and backward to add and subtract on the number line.

Carlos gets to class at **9:08 a.m.** He has to write down homework assignments and complete morning work before math begins at **9:30 a.m.** How many minutes does Carlos have to complete his tasks before math begins?



Use your number line template to label the points when Carlos arrives and when math starts.



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## Concept Development

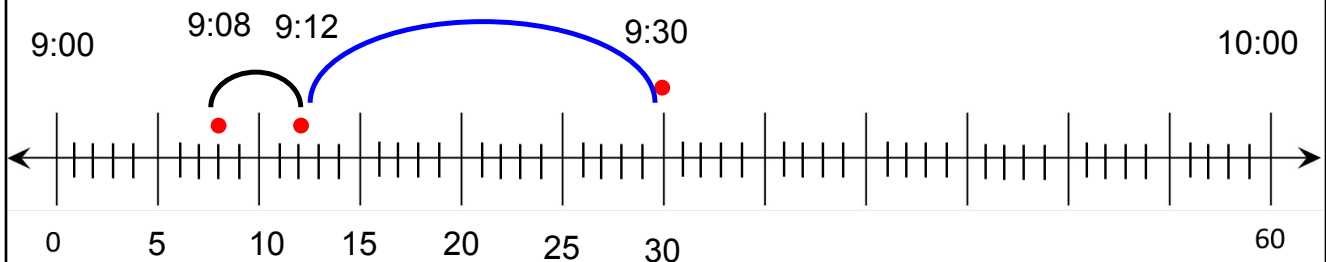
**Part 1:** Count forward and backward to add and subtract on the number line.

Carlos gets to class at 9:08 a.m. He has to write down homework assignments and complete morning work before math begins at 9:30 a.m. How many minutes does Carlos have to complete his tasks before math begins?

Carlos takes 4 minutes to write down homework assignments.

Use your number line to show when Carlos finishes his first task.

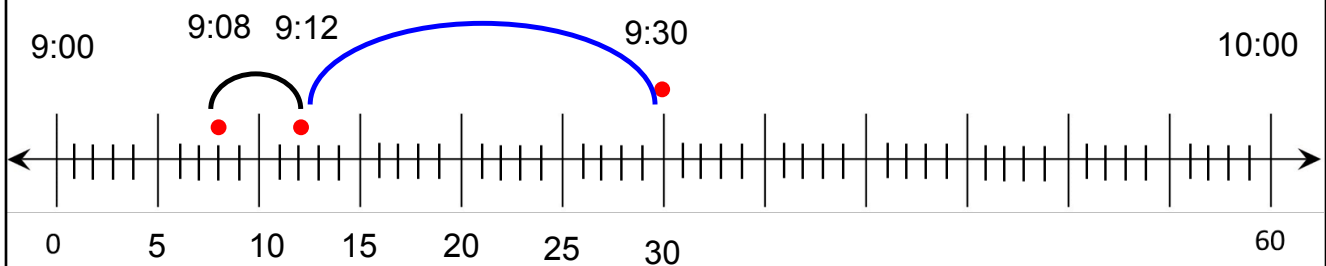
What does this interval show?



Lesson  
5**Concept Development****Part 1:** Count forward and backward to add and subtract on the number line.

Carlos gets to class at 9:08 a.m. He has to write down homework assignments and complete morning work before math begins at 9:30 a.m. How many minutes does Carlos have to complete his tasks before math begins?

What does this interval show?



How can we find the number of minutes it takes Carlos to complete morning work?

What addition sentence represents this problem?

$$12 \text{ minutes} + \underline{\quad} = 30 \text{ minutes}$$

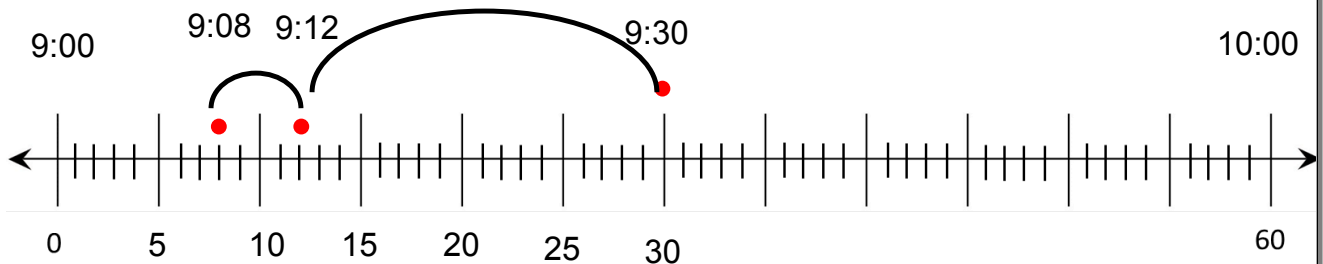
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## Concept Development

**Part 1:** Count forward and backward to add and subtract on the number line.

Carlos gets to class at **9:08 a.m.** He has to write down homework assignments and complete morning work before math begins at **9:30 a.m.** How many minutes does Carlos have to complete his tasks before math begins?

How can we model this problem by counting backward?



What subtraction sentence represents this problem?

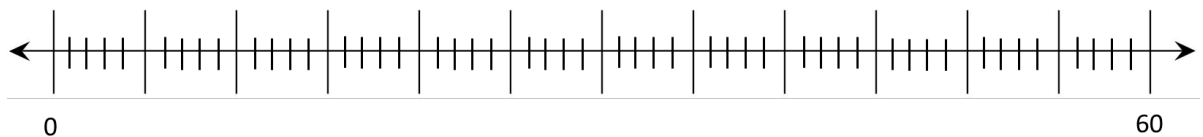


## Concept Development

More practice

**Part 1:** Count forward and backward to add and subtract on the number line.

Lunch starts at 12:05 p.m. and finishes at 12:40 p.m.  
How long is lunch?

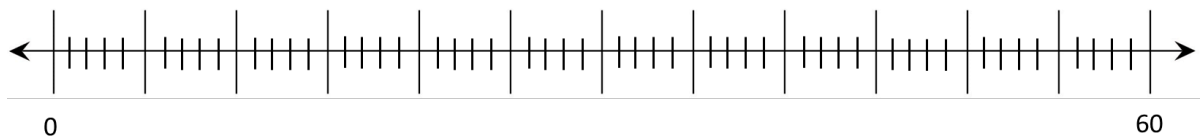


Lesson  
5**Concept Development**

More practice

**Part 1:** Count forward and backward to add and subtract on the number line.

Joyce spends 24 minutes finding everything she needs at the grocery store. It takes her 7 minutes to pay. How long does it take Joyce to find her groceries and pay?





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## Concept Development

Part 2: Solve word problems involving time intervals within 1 hour.

Gia, Carlo's classmate, gets to class at 9:11. It takes her 19 minutes to write homework assignments and complete morning work. How can we figure out if Gia will be ready to start math at 9:30?

What is known?

What is unknown?

Use your number line to label the known and unknown intervals.



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## Concept Development

Part 2: Solve word problems involving time intervals within 1 hour.

Joey gets home at 3:25 p.m. It takes him 7 minutes to unpack and 18 minutes to have a snack before starting his homework.  
What is the earliest time Joey can start his homework?

What is known?

What is unknown?

Use your number line to label the known and unknown intervals.



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## Concept Development

Part 2: Solve word problems involving time intervals within 1 hour.

Shane's family wants to start eating dinner at 5:45 p.m. It takes him 15 minutes to set the table and 7 minutes to help put the food out. If Shane starts setting the table at 5:25 p.m., will his chores be finished by 5:45 p.m.?

What is known?

What is unknown?

Use your number line to label the known and unknown intervals.



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## Concept Development

Part 2: Solve word problems involving time intervals within 1 hour.

Tim get on the bus at 8:32 a.m. and gets to school at 8:55 a.m. How long is Tim's bus ride?

What is known?

What is unknown?

Use your number line to label the known and unknown intervals.



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## Concept Development

Part 2: Solve word problems involving time intervals within 1 hour.

Joanne takes the same bus as Tim, but her bus ride is 25 minutes. What time does Joanne get on the bus?

What is known?

What is unknown?

Use your number line to label the known and unknown intervals.



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## Concept Development

Part 2: Solve word problems involving time intervals within 1 hour.

Davis has 3 problems for math homework. He starts at 4:08 p.m. The first problem takes him 5 minutes, and the second takes him 6 minutes. If Davis finishes at 4:23 p.m., how long does it take him to solve the last problem?

What is known?

What is unknown?

Use your number line to label the known and unknown intervals.



