G3-M2-Lesson 5
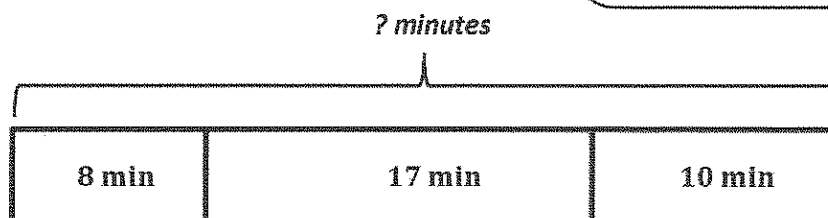
Luke exercises. He stretches for 8 minutes, runs for 17 minutes, and walks for 10 minutes.

a. How many total minutes does he spend exercising?

> I can draw a tape diagram to show all the known information. I see all the parts are given, but the whole is unknown. So, I can label the whole with a question mark.

? minutes

8 min	17 min	10 min

> I can estimate to draw the parts of my tape diagram to match the lengths of the minutes. 8 minutes is the shortest time, so I can draw it as the shortest unit. 17 minutes is the longest time, so I can draw it as the longest unit.
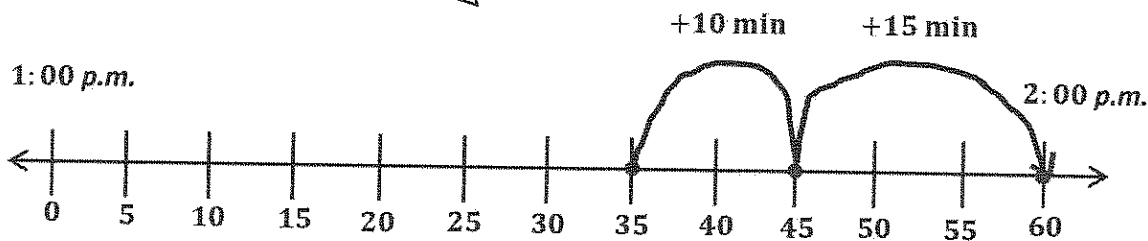
$$8 + 17 + 10 = 35$$

Luke spends a total of 35 minutes exercising.

> I can write an addition equation to find the total number of minutes Luke spends exercising. I also need to remember to write a statement that answers the question.

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Lesson 5: Solve word problems involving time intervals within 1 hour by adding and subtracting on the number line.

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b. Luke wants to watch a movie that starts at 1:55 p.m. It takes him 10 minutes to take a shower and 15 minutes to drive to the theater. If Luke starts exercising at 1:00 p.m., can he make it on time for the movie? Explain your reasoning.

> I can draw a number line to show my reasoning. I can plot the starting time as 1:35 because I know it takes Luke 35 minutes to exercise from part (a). Then I can add 10 minutes for his shower and an additional 15 minutes for the drive to the theater.

1:00 p.m.

+10 min   +15 min

2:00 p.m.

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 ←—┬——┬——┬——┬——┬——┬——┬——┬——┬——┬——┬——┬——┬—→
   0   5  10  15  20  25  30  35  40  45  50  55  60
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No, Luke can't make it on time for the movie. From the number line, I can see that he will be five minutes late.

> I can see on the number line that Luke will be at the theater at 2:00 p.m. The movie starts at 1:55 p.m., so he'll be 5 minutes too late.

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Lesson 5: Solve word problems involving time intervals within 1 hour by adding and subtracting on the number line.

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