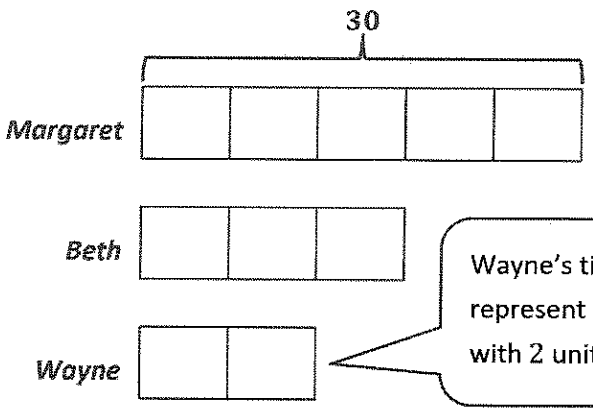
G5-M4-Lesson 12

Solve using the RDW (Read, Draw, Write) method.

1. Beth ran her leg of a relay race in $\frac{3}{5}$ the amount of time it took Margaret. Wayne ran his leg of the relay race in $\frac{2}{3}$ the time it took Beth. Margaret finished the race in 30 minutes. How long did it take for Wayne to finish his part of the race?



Since Beth's time was $\frac{3}{5}$ of Margaret's, I can partition Margaret's time into 5 equal units. Now I can show that Beth's time is $\frac{3}{5}$ of Margaret's.

Wayne's time was $\frac{2}{3}$ of Beth's time. 3 units represent Beth's time, so I can show Wayne's time with 2 units. $\frac{2}{3}$ of 3 units is 2 units.

$5\ units = 30$

$1\ unit = 30 \div 5 = 6$

I can use my tape diagram to help me solve. I know that Margaret finished in 30 minutes; therefore, the 5 units representing Margaret's time are equal to 30 minutes.

I can visualize each unit in the tape diagram being equal to 6 minutes.

$2\ units = 2 \times 6 = 12$

Wayne finished the race in 12 minutes.

Wayne's time is equal to 2 units of 6 minutes each, or 12 minutes.

2. Create a story problem about a brother and sister and the money they spend at a deli whose solution is given by the expression $\frac{1}{3} \times (7 + 8)$.

Two siblings went to a deli. The sister had $7.00, and her brother had $8.00. They spent one-third of their combined money. How much money did they spend in the deli?

The parentheses tell me to add first. In my story problem, I wrote that the siblings combined their money.