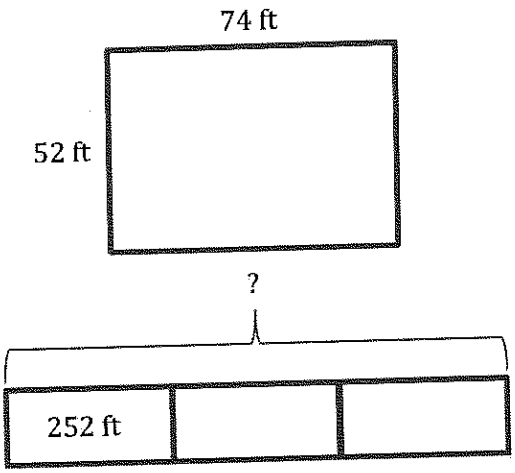
G3-M7-Lesson 30

Andrew solves the following problem as shown below.

A basketball court measures 74 feet by 52 feet. Bill dribbles the basketball around the court sidelines 3 times. What is the total number of feet Bill dribbles the ball?



$$P = 52 \text{ ft} + 74 \text{ ft} + 52 \text{ ft} + 74 \text{ ft}$$
$$= 126 \text{ ft} + 126 \text{ ft}$$
$$= 252 \text{ ft}$$

$$252 + 252 + 252$$
$$= 750 + 6$$
$$= 756$$

Bill dribbles the ball 756 feet.

1. What strategies did Andrew use to solve this problem?

   Andrew drew a picture of the basketball court and labeled the side lengths. Then he added to find the perimeter. Finally, he used a tape diagram to find the total of 3 perimeters.

Analyzing my classmates' work improves my problem-solving skills because I am able to see different and sometimes more efficient ways of solving a problem.

2. What did Andrew do well?

   Andrew used all the steps in the RDW process. He used mental math for his calculations. He also drew and labeled a tape diagram to show his thinking for his second step.

3. What are some suggestions that you would give Andrew to improve his work?

Some suggestions would be to have Andrew use a letter to represent the unknown in the tape diagram and label all of the units in his addition sentence.

4. What are some strategies you would like to try based on Andrew's work?

I would like to practice thinking about numbers like $252 + 252 + 252$ *as* $(250 + 250 + 250) + (2 + 2 + 2)$. *That will help me use mental math strategies to add and not have to use the algorithm as much.*

Having classmates analyze my work is helpful because I am able to get ideas on how to improve it.