

## Basketball Team

### Teaching Goal

After participating in this lesson, students should be able to identify the missing piece of information that is preventing them from solving the problem. They should also be able to choose a number or other data that will enable them to solve the problem. They should understand that there is a range of possible numbers or data that could be used to solve the problem.

Ryan, Eli, and Kareem are on the school basketball team. In last night's game, Ryan scored 10 points more than Eli and five points fewer than Kareem. How many points did each of the boys score?

### Teaching Plan

1. Write the problem on the overhead projector, chalkboard, or whiteboard.
2. Have the students read the problem.
3. Lead a discussion with the whole class using the following questions as part of the discussion.

**What question is being asked?** How many points did each boy score?

**What information do you know from the problem?**

Ryan scored 10 points more than Eli. Ryan scored 5 points fewer than Kareem.

**Why can't you answer the question?** It is not known how many points were scored by any of the boys.

**Pick the number of points Eli might have scored and write it on a piece of paper.**

**Now figure out the number of points scored by Ryan and Kareem.**

**What number did you pick for Eli?**

4. Discuss each number volunteered by a student and determine which ones work.

For example, **If Eli scored 10 points, how many points did Kareem score? Are you able to figure out the number of points each boy scored if we know the number of points scored by Ryan? Kareem?**

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Repeat above procedure so that students will see that if they know the number of points scored by one boy, they can figure out the scores of the other two boys.

**Problem 2 The Swim Meet**

Lily is practicing for the swim meet by swimming laps in the pool every day. Each lap is a total of 25 yards. Last week she practiced 4 days and swam the same number of laps each day. How many yards did she swim last week?



1. What is the question? \_\_\_\_\_  
\_\_\_\_\_
2. What information do you know from the problem?  
\_\_\_\_\_  
\_\_\_\_\_
3. What else do you need to know to solve the problem? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. Pick the number of laps that Lily might have swum each day. \_\_\_\_\_
5. How many yards would she have swum last week? \_\_\_\_\_