

# Chapter 5 Problem Wrap-Up

## Student Text Page

229

## Suggested Timing

20 min

## Tools

- graphing calculators
- grid paper

## Related Resources

BLM 5.CP.1 Chapter Problem  
Wrap-Up Rubric  
BLM G1 Grid Paper

## Summative Assessment

- Use **BLM 5.CP.1 Chapter 5 Problem Wrap-Up Rubric** to assess student achievement.

## Teaching Suggestions

- You may choose to use the Chapter Problem throughout the chapter, in which case you should introduce the Chapter Problem the first day and revisit it as it comes up in the chapter exercises.
- If you choose to use the Chapter Problem as a summative assessment tool, then you should wait until the end of the chapter and then introduce the Chapter Problem, and have students work on the series of questions involved.
- You might discuss whether they have been involved in fundraising activities in the past, and if so, how they think that Logan compares to the one or ones they have done. You may wish to give students time to work on the problem, either individually or as a group.

### Level 3 Sample Response

- a) Let  $s$  represent the number of students who attend the dog show.

Let  $a$  represent the number of adults who attend the dog show.

$$s + a = 525$$

$$5s + 8a = 3585$$

$$8s + 8a = 4200$$

$$5s + 8a = 3585$$

$$\text{subtract} \quad 3s = 615$$

$$s = 205$$

So, 205 students attended the dog show.

- b) Now, solve for  $a$ :

$$205 + a = 525$$

$$a = 320$$

So, 320 adults attended the dog show.

- c)  $3585 - (1200 + 2.50 \times 525)$

$$3585 - 2512.50$$

$$= 1072.50$$

Logan raised \$1072.50 for the dog rescue organization.

### Level 3 Notes

Look for the following:

- Appropriate solutions for all parts of the problem presented with minor errors
- Ability to set up the linear relations from this real-life situation
- Understanding of the concept of solving a linear system
- Understanding of problem solving techniques
- Organized justification for responses

### What Distinguishes Level 2

At this level, look for the following:

- Some appropriate solutions for most parts of the problem with some significant errors
- Some ability to set up the linear relations from this real-life situation
- Some understanding of the concept of solving a linear system
- Some understanding of problem solving techniques, but difficulty in applying the techniques
- Somewhat organizes justifications for responses

### **What Distinguishes Level 4**

At this level, look for the following:

- Appropriate and detailed solutions for all parts of the problem with very few or no errors
- Thorough understanding of the concept of solving a linear system
- Highly effective planning and ability to set up and analyze a linear relation based on this real-life situation
- Clear, accurate, and detailed justifications for responses