

## Summarize

Have students post their solutions. You can also use the ones listed on Teaching Aid 2.2: Tacos and Drinks if they do not generate alternate solutions. Have your students summarize the symbolic method that they think is most efficient. Most will agree that subtracting the two equations is most efficient. Some of the other strategies students might use (see Teaching Aid 2.2: Tacos and Drinks) lead to a “substitution” method. This will be discussed in the next Problem.

**ACE**

*Assignment Guide for Problem 2.2*

Applications: 18–22 | Connections: 52–64  
Extensions: 78–80

## Answers to Problem 2.2

**A. 1.** This Question is included to give students a way to visualize finding the difference between two equations.

**One Method:** The difference between the two equations representing the two orders is two tacos for an additional \$2. So one taco must cost \$1. Knowing that a taco costs \$1 means that Jasmine and her brother spent \$4 on tacos plus 2 drinks for a total of \$7. The two drinks must cost \$3 or \$1.50 each. Using Pablo and his brother’s order means that they spent \$6 on tacos and \$3 on two drinks for a total of \$9. Again, each drink costs \$1.50.

**2.** See Teaching Aid 2.2: Tacos and Drinks for other methods.

**B. 1.** 
$$\begin{cases} 6t + 2d = 9 \\ 4t + 2d = 7 \end{cases}$$

**2.** It probably appears that Pedro subtracted one equation from the other. It makes sense that equals subtracted from equals gives equal results.

See Teaching Aid 2.2: Tacos and Drinks for how to use symbolic statements to represent other ways to think of this Problem.

**C. 1.** If students are quite literal about drawing diagrams similar to Pedro’s diagram in Question A, they might draw the diagram below. (See Figure 1.)

**2.** The diagram shows two equations. The difference between the equations is three drinks representing  $y$  are equal to six dollars. This means that each drink is equal to two dollars or  $y = 2$ . One taco representing  $x$  plus one drink is equal to five dollars. This shows that each taco is equal to three dollars, or  $x = 3$ .

**D. 1.**  $x = -0.5, y = 5.5$

**2.**  $x = -1, y = 3.5$

Figure 1

