METHOD 2

Using a Table Another approach is to use a table showing the amount paid for various numbers of races.

STEP 1 **Calculate** the race entry fee.

Number of races	Amount paid
5	$125
6	?
7	?
8	$170

+ 3 (5 → 8) + $45 ($125 → $170)

The number of races increased by 3, and the amount paid increased by $45, so the race entry fee is $45 ÷ 3 = $15.

STEP 2 **Find** the membership cost.

Number of races	Amount paid	
0	$50	
1	$65	− $15
2	$80	− $15
3	$95	− $15
4	$110	− $15
5	$125	− $15

The membership cost is the cost with no races. Use the race entry fee and work backwards to fill in the table. The membership cost is $50.

PRACTICE

1. **CALENDARS** A company makes calendars from personal photos. You pay a delivery fee for each order plus a cost per calendar. The cost of 2 calendars plus delivery is $43. The cost of 4 calendars plus delivery is $81. What is the delivery fee? What is the cost per calendar? Solve this problem using two different methods.

2. **BOOKSHELVES** A furniture maker offers bookshelves that have the same width and depth but that differ in height and price, as shown in the table. Find the cost of a bookshelf that is 72 inches high. Solve this problem using two different methods.

Height (inches)	Price (dollars)
36	56.54
48	77.42
60	98.30

3. **WHAT IF?** In Exercise 2, suppose the price of the 60 inch bookshelf was $99.30. Can you still solve the problem? *Explain*.

4. **CONCERT TICKETS** All tickets for a concert are the same price. The ticket agency adds a fixed fee to every order. A person who orders 5 tickets pays $93. A person who orders 3 tickets pays $57. How much will 4 tickets cost? Solve this problem using two different methods.

5. **ERROR ANALYSIS** A student solved the problem in Exercise 4 as shown below. *Describe* and correct the error.

Let p = price paid for 4 tickets

$$\frac{57}{3} = \frac{p}{4}$$

$$228 = 3p$$

$$76 = p$$