28. ♦♦ **MULTIPLE REPRESENTATIONS** Your cell phone plan costs $40 per month plus $.10 per text message. You receive a bill for $53.80.

   a. Making a Table Copy and complete the table below. Use the table to estimate how many text messages you sent.

Text messages	0	50	100	150	200
Monthly bill	$40	?	?	?	?

   b. Writing a Model Write an equation for the situation. Solve it to find exactly how many text messages you sent.

   c. Comparing Answers Is your estimate from part (a) compatible with the exact answer from part (b)? *Explain*.

29. WOOD SHOP You have a piece of wood that is 72 inches long. You cut the wood into three pieces. The second piece is 6 inches longer than the first piece. The third piece is 6 inches longer than the second piece. Draw a diagram and then write and solve an equation to find the lengths of the three pieces.

30. POSTERS You want to tape five posters on a wall so that the spaces between posters are the same. You also want the spaces at the left and right of the group of posters to be three times the space between any two adjacent posters. The wall is 15 feet wide and the posters are 1.5 feet wide. Draw a diagram and then write and solve an equation to find how to position the posters.

31. PACKING WEIGHT A moving company weighs 20 boxes you have packed that contain either books or clothes and says the total weight is 404 pounds. You know that a box of books weighs 40 pounds and a box of clothes weighs 7 pounds. Write and solve an equation to find how many boxes of books and how many boxes of clothes you packed.

32. MULTI-STEP PROBLEM A duathlon consists of a run, a bike ride, and a second run. Use the information below about the average rates of one participant who completed a 55 kilometer duathlon in 2 hours 35 minutes.

Running	Biking	Running
12 km/h	30 km/h	12 km/h

   a. Model Write a verbal model that shows the race distance as the sum of the total running distance and the biking distance.

   b. Translate Write an equation based on the verbal model.

   c. Solve Solve the equation to find how much time the participant spent running and how much time the participant spent biking.

   d. Check Find the total running distance and the biking distance, and verify that their sum is 55 kilometers.

33. CHALLENGE You are hanging fliers around a cylindrical kiosk that has a diameter of 5 feet. You want to hang 15 fliers that are 8.5 inches wide so they are evenly spaced. How far apart should the fliers be placed?