Student Activity 3-A: Getting from Here to There

Now you can start practicing what you learned when you tried all of Tuff-Bot's buttons.

Things to Remember:

Tuff-Bot remembers all the commands it has been given until you press the Clear (**X**) button. Before each new turn, remember to erase the last set of commands. Just press **X**.

Ask your teacher if it is OK to have Tuff-Bot make sounds.

Things to Try:

How many of the following can you and your group do? Check them off when you do them.

❑ Everyone sits on the floor in a big circle. Choose one person to go first. They will point Tuff-Bot at person sitting across the circle and press the **Forward** button enough times to get Tuff-Bot to go to that person and then press **GO**.

 How close did Tuff-Bot get to the other person? Did it go too far? What do you learn about how far Tuff-Bot goes with each step? If Tuff-Bot went too far, enter commands to bring it back. If it didn't go far enough, press **X** and add more Forward commands. The person that Tuff-Bot was sent to now aims it at a different person and tries to send it to the new person.

 Continue in this way until everyone has had a couple of turns. You will likely find that your estimates of the distance needed get better and better.

❑ Once you have figured out how many Forward commands it takes to get to a person across the circle, try this: Code Tuff-Bot to go to that person and then go backward the same number of steps. It should return to you! Did it?

❑ Now, program Tuff-Bot go to two different people using one set of commands. Send Tuff-Bot one person, give it one or more turn commands, which will take it to a second person. Let everyone have a turn doing this.

❑ Can you have Tuff-Bot go to three different people using one set of commands?

❑ Make up another activity in which you get Tuff-Bot to go to a particular spot in the room.