Assignment 6.2

In this assignment you will be extending classes that you wrote in assignment 6 (for parts 1-5), assignment 4, and assignment 5.

For this assignment you should:
• complete any two parts from parts 1-5 (you choose which two)
• complete parts 6.1, 6.2, and 7

Part 1: TriplePinSetter
Bowling in karel’s world has changed a bit. Now, instead of one beeper at each corner, three beepers must be placed. The class TriplePinSetter should extend the class PinSetter so that it sets up the bowling game as shown here:

![Diagram of bowling setup]

Your test program should be the same as for the previous assignment, except that Karel must start with 30 beepers in his bag instead of 10.
Part 2: PickerBot
Karel is still a part-time gardener. The beepers he has planted have bloomed and it's time to pick them. Karel's task is to pick up the beeper on each corner around the "+" shaped wall as shown below.

PickerBot must extend the class PlanterBot. You can use the same Test class to complete the task, using the world cross2.kwld from the class web site.
Part 3: DoubleCarpenterBot
Karel's carpet customers want thicker carpets. Extend CarpenterBot so that a carpeted room has two beepers on each corner.

Use the same Test class as in Assignment 6.1 to test DoubleCarpenterBot.
Part 4: TrailBlazer
When climbing mountains, karel likes to blaze a path by leaving beepers along the way. He leaves two beepers at the summit to mark his accomplishment.

TrailBlazer should extend the MountainClimber class. Use the same Test class that you made for assignment 6.1.
Part 5: MultipleRetrieverBot
On the way home from the supermarket, Karel's shopping bag ripped slightly at the bottom, leaking several expensive items. This time five beepers fell out of Karel's bag at a time. Program Karel to pick up all the dropped items and then return to the initial situation.

Use the world groceries2.kwld from the class web site.
Part 6.1: LongStairSweeper

Open up your BlueJ project from Assignment 4, and extend the StairSweeper class so that it can sweep stairs that have longer treads, as shown below:

Use the world longStairs.kwld.

Part 6.2: HighStairSweeper

Extend the StairSweeper Class so that it can sweep stairs that have very high risers, as shown below:

Use the world highStairs.kwld.
Open up your BlueJ project from Assignment 5 and extend the HarvesterBot so that it can harvest a diagonal field, as shown below:

Use the world DiamondField.kwld.