5) For this question, I assume that the ant does not start on a tile with food, since it’s hard to tell if the first box is grey or not. If the first tile does have food, just add one to my answers.

Also, my coordinates are in (row, column)

1. The ant first moves to (1,2), sensing there’s no food, moves to 1,3). This whole time, there will never be food ahead of it, so it will just keep moving forwards (towards the right). The ant will not eat anything.
2. There is no food ahead, so it will turn right. There is still no food ahead, so it will turn left (facing right again). Then it will move to (1,2)

There is no food ahead, so it will turn right. There is food ahead, so it will move twice. Now it is at (3,2)

There is no food ahead, so it will turn right. There is still no food ahead, so it will turn left (facing down again). Then it will move to (4,2).

There is no food ahead, so it will turn right. There is still no food ahead, so it will turn left (facing down again). Then it will move to (5,2).

Since there is no more food to the right and straight of the ant’s path, it will just go down until the time is up.

The ant ate 2 food in the path.