

## 2014 AP<sup>®</sup> COMPUTER SCIENCE A FREE-RESPONSE QUESTIONS

2. This question involves reasoning about the GridWorld case study. Reference materials are provided in the appendixes.

A `Director` is a type of `Rock` that has the following characteristics.

- A `Director` has an initial color of `Color.RED` and alternates between `Color.RED` and `Color.GREEN` each time it acts.
- If the color of a `Director` is `Color.GREEN` when it begins to act, it will cause any `Actor` objects in its neighboring cells to turn 90 degrees to their right.

Write the complete `Director` class, including the zero-parameter constructor and any necessary instance variables and methods. Assume that the `Color` class has been imported.