**What is the multiplicity of each of the following relationships in just the direction given? State any assumptions you have to make.**

1. **Player to team**
2. **Student to course**

**Player to Team**

The relationship from a **player to a team** is **many-to-one**.

* **Multiplicity:** Many players can belong to a single team.
* **Assumption:** We're assuming a player can only be a member of one team at a time in the context of a single season or league. For example, in professional sports, a player is typically contracted to one team and cannot play for multiple teams simultaneously.

**Student to Course**

The relationship from a **student to a course** is **many-to-one**.

* **Multiplicity:** Many students can be enrolled in a single course.
* **Assumption:** We're assuming a student enrolls in many courses, but when looking at the relationship from the student's perspective to a single course, they are just one of many students in that course. The inverse relationship, "Course to Student," would be one-to-many, as a single course can have many students. This is a common representation in a university database.