Dear Students,

I am the general manager (GM) of a National Hockey League (NHL) team. I have to decide which players to cut (remove) from the team, and which players to keep. This is a very difficult decision for me to make. I care about the players and this decision will end the hockey careers of those who are cut. This happens every season, so I want a system that can be used to make this decision every year. Our team has a salary cap. That means we have a limit to the amount of money we can spend on player salaries. We have added the player's salaries to the data. Salary- this is the amount of money the team has to pay this player every year. The less money we have to pay the players, the more money we make. We want to keep the amount of money we spend on player's salaries as low as possible.

Other things to consider when deciding which players to keep and which players to cut:

\*Ranking - This is a score given to players. It tells how good the player is. Data such as how goals scored and how many assists earned are used to decide this score. – the higher, the better.

\*Age- for most players they hit their peak by age 25. After age 30 performance declines.

\*Players popularity among the fans- The more popular players cause fans to buy tickets and team merchandise, which brings more money into the team.

\*College backgrounds- players who are smarter tend to do better in school, play better, and have a longer playing career.

Please look at the data included with this letter and create a system that can be used every time I have to cut players. Please list players in the order that I should cut them from the team. We do not know how many will be cut yet. I will start at the top and cut the number of players we need to cut this year. Email your choice back to me and explain how you made your decision. Explain how we can use your system with other teams and other sets of data.

Thank you,

Hockey G. Manager