Problem

In 2009, the average (mean) salaries for players in various professional sports were as follows:

- NBA (National Basketball Association) players, \$4.9 million;
- NFL (National Football League) players, \$1.3 million;
- NHL (National Hockey League) players, \$1.8 million; and
- MLB (Major League Baseball) players, \$2.5 million.

Source: Wikipedia.org

a) Consider and complete the information in the following chart.

League	NBA	NFL	NHL	MLB
Average salary (millions of \$)	4.9	1.3	1.8	2.5
Number of Games in a regular season	82	16	82	162
Average salary per regular season game				

b) Kevin Garnett of the NBA's Boston Celtics made 24.75 million dollars in 2009. In the 71 games in which he participated, he played an average of 32.8 minutes per game. He averaged 9.2 rebounds per game, and scored an average of 18.8 points per game.

(i) If paid solely according to the number of minutes he played in a season, how much money did he make per minute played? Per hour?

(ii) If paid solely according to how many rebounds he made in a season, how much money did he make per rebound?

(iii) If paid solely according to how many points he scored in a season, how much money did he make per point scored?

Hints

Hint 1 - b)(i) What is the total number of minutes Kevin Garnett played?

Hint 2 - b)(ii) What is the total number of rebounds he made?

Hint 3 - b)(iii) What is the total number of points he scored?

Solution

a) The completed table:

League	NBA	NFL	NHL	MLB
Average salary (millions of $)	4.9	1.3	1.8	2.5
Number of Games in a regular season	82	16	82	162
Average salary per regular season game	$59 756	$81 250	$21 951	$15 432

(Averages have been rounded to the nearest dollar.)

b)(i) Since he played a total of $71 \times 32.8 = 2328.8$ minutes during the regular season, his salary per minute is $\$24\,750\,000 \div 2328.8 \approx \$10\,627.79$, i.e., about $\$10\,628$ per minute. Since there are 60 minutes in 1 hour, his pay is about $\$10\,627.79 \times 60 \approx \$637\,667.40$ per hour.

(ii) His total rebounds were $71 \times 9.2 = 653.2$, or 653 rebounds. Thus he made $\$24\,750\,000 \div 653 \approx \$37\,901.91$, or about $\$37\,902$ per rebound.

(iii) He scored a total of $71 \times 18.8 = 1334.8$, or 1335 points. Thus he made $\$24\,750\,000 \div 1335 = \$18\,539.33$, or about $\$18\,539$ per point.