

## CHAPTER 7 TASK

### Escalating NBA Salaries

1. The table shows the approximate average National Basketball Association (NBA) player's salary for each season of the twenty-year period from 1984 to 2004. Enter the data into a spreadsheet, a graphing calculator, a dynamic statistics software file, or a paper and pencil table of values. Let the 1984-1985 season be Season 1 in your table.
2. With or without technology, create a scatterplot of the data. Is the data best modelled with a linear relation, a quadratic relation, or an exponential relation? Explain your choice.
3. Use a trial-and-error method to determine the equation of a line or of a curve of best fit.

Season	Average Salary (\$)
1984-1985	330 000
1985-1986	382 000
1986-1987	431 000
1987-1988	502 000
1988-1989	575 000
1989-1990	717 000
1990-1991	927 000
1991-1992	1 100 000
1992-1993	1 300 000
1993-1994	1 500 000
1994-1995	1 800 000
1995-1996	2 000 000
1996-1997	2 300 000
1997-1998	2 600 000
1998-1999	3 000 000
1999-2000	3 600 000
2000-2001	4 200 000
2001-2002	4 500 000
2002-2003	4 546 000
2003-2004	4 917 000

4. Use your equation to determine the average NBA player's salary for the 2006-2007 season.
5. Research the average NBA player's salary for the 2006-2007 season. Compare this value to your answer to Question 4. Offer an explanation for the difference.
6. If paper and pencil was your method of choice in question 2, use technology now to enter the data. Perform a regression analysis to determine the equation of a line or curve of best fit.
7. Use your equation from question 6 to determine the average NBA player's salary for the 2013-2014 season, assuming the current trend continues.