## Buying a Used Car

Work in pairs. You and your partner are going to "buy" a used car. You will do your research on autotrader.com. You and your partner will first choose any credit score you want and use the corresponding interest rate. You must choose between a 4 year loan and a 5 year loan. You can pay as much as $\$ 3,000$ as a down payment. You need to keep your payments under $\$ 200$ a month. Find a good car that can meet your needs. Show your work demonstrating your calculations for:

1) Down payment and principal
2) Simple interest
3) Total cost of loan (including interest)
4) Monthly payments

| Credit Score | Rating | Interest Rate |
| :---: | :---: | :---: |
| 450 | Very Poor | $20 \%$ |
| 620 | Poor | $15 \%$ |
| 675 | Fair | $12 \%$ |
| 720 | Good | $7 \%$ |
| 800 | Excellent | $2 \%$ |

Questions to think and write about after you are finished:

1) Was it easy or hard to find a car that fit within your budget? Why was it easy or why was it hard?
2) Is it fair that people with a higher credit score pay a lower interest rate? Explain your thinking.
3) In this problem, you used simple interest to calculate your costs. Most loans use compound interest which is harder to calculate. In compound interest the amount you have to pay interest on goes down as you pay off more of your principle. Do you think that using compound interest would cost less money or more money than using simple interest. Explain your answer.
