

### Problem 1.28

Use economic equivalence to determine the amount of money or value of  $i$  that makes the following statements correct.

- (a) \$5000 today is equivalent to \$4275 exactly 1 year ago at  $i = \underline{\hspace{1cm}}\%$  per year.
- (b) A car that costs \$28,000 today will cost \$       a year from now at  $i = 4\%$  per year.
- (c) At  $i = 4\%$  per year, a car that costs \$28,000 now, would have cost \$       one year ago.
- (d) Last year, Jackson borrowed \$20,000 to buy a preowned boat. He repaid the principal of the loan plus \$2750 interest after only 1 year. This year, his brother Henri borrowed \$15,000 to buy a car and expects to pay it off in only 1 year plus interest of \$2295. The rate that each brother paid for his loan is        % for Jackson and        % per year for Henri.
- (e) Last year, Sheila turned down a job that paid \$75,000 per year. This year, she accepted one that pays \$81,000 per year. The salaries are equivalent at  $i = \underline{\hspace{1cm}}\%$  per year.