Time to Remodel

Finding Simple Interest

Cheryl's parents are remodeling their home. They told Cheryl that after her room is finished, she can have all new furniture. When her parents helped her to pick her furniture, Cheryl learned about loans and interest. Solve the problems that follow. Use the formula $I = p \times r \times t$. If necessary, round answers to the nearest cent.



1 The new rug in Cheryl's room costs \$295. Her parents borrowed the full amount of the cost of the rug at an interest rate of 8% for 4 years. How much interest did they pay?

What was the total amount they paid for the rug after 4 years?

2 Cheryl's new bedroom set costs \$995.79. Her parents paid \$200 and agreed to finance the rest of the amount at an interest rate of 7.5% for 4 years. How much interest did they pay?

What was the total amount they paid for the bedroom set after 4 years?

3 Cheryl's new stereo system costs \$449.69. Her parents paid \$100 of the total and decided to finance the rest of the amount at an interest rate of 9% for 3 years. How much interest did they pay?

How much interest did they save by making a down payment of \$100?

If Cheryl's parents did not borrow any money to pay for the rug, furniture, and stereo system, how much would they have saved in interest? (See Problems 1, 2, and 3.)

5 Cheryl's older brother, Jeff, is thinking of buying a car. He has \$2,500 for a down payment and must borrow \$5,000. He can borrow the money at Smith Bank at an interest rate of 8% per year for 4 years. At Jones Bank he can borrow the money at $7\frac{1}{2}$ % for 5 years. The monthly payment at Jones Bank is a little less than the monthly payment at Smith Bank. Jeff told Cheryl that he thinks the loan at Jones Bank is the better deal because the interest rate is lower. She says that the loan from Smith Bank is better deal. Who is right? Explain.