

Calculating Interest Word Problems Solutions

1. Interest earned from a bank

Joe had \$350 in his savings account. The bank account earns an annual interest of 3%. How much interest will he earn in 5 years? 6 months?

Answers

5 years: $I = prt = 350 \times 0.03 \times 5 = \52.50

6 months: $I = prt = 350 \times 0.03 \times 0.5$ (or $6/12$) $= \$5.25$

2. Interest paid on a loan

Mrs. Hayes borrowed \$9,500 from the bank to buy a new car. The interest rate is 6% per year. How much simple interest will she pay if it takes her 3 years to repay the loan?

Answer

$I = prt = 9500 \times .06 \times 3 = \$1,710$

3. Interest paid on a credit card

Sandra purchased \$1,200 worth of electronic equipment on her new credit card, with an annual interest rate of 20%. If she has no other charges on the card and does not pay off the balance at the end of the month, how much money will she owe the credit card company after 1 month?

Answer

$I = prt$

$I = 1200 \times 0.2 \times 1/12$

$I = \$20.$

The interest owed after 1 month is \$20. So, the total amount owed would be $\$1,200 + 20 = \$1,220.$