## What are some things you can pay rent for?

# 7.7 Simple Interest

Students will be able to calculate interest earned and account balances.

#### Vocab

Interest - The amount earned or paid for the use of money

Principal - The amount of money deposited or borrowed

Simple interest - Interest that is earned or paid only on the

**Annual interest rate** - The percent of the principal earned or paid per year

#### Simple Interest Formula

Simple interest I is given by the formula

I=Porot time yrs

Interest Principle

Where *P* is the principal, *r* is the annual interest rate (written as a decimal), and *t* is the time in years.

#### Finding Simple Interest

Your grandma gives you a bond as a way to earn money. She gave you a \$1500 bond that earns 4% simple interest per year on its purchase price, how much will it earn in interest after 2 years?



A \$1000 bond earns 6% simple annual interest. What is the interest earned after 4 years and 3 months?

1000.(.06)(4.25)



#### Balance

The balance  $\boldsymbol{A}$  of an account that earns simple annual interest is the sum of the principal  $\boldsymbol{P}$  and the

interest Prt. Jing Tothert

Final State

A = P + Prt

ASP(11TI)

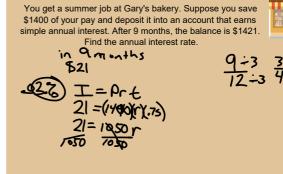
Angie just purchased a new sports car. She financed \$45,000 and must pay it back over 5 years with 11% interest. How much will she have paid in all for her car?

P + Interest.

A = 45,000+24,750 T = Prt T = (45.00 + 24.750) T = 24.750

Emily has a balance of \$2,348 on her credit card. She threw the card away so she could never use it again. She has 3 years and 6 months to pay off the balance. The interest rate on her card is 21%. When Emily finally pays off her credit card, how much will she have paid in all?

VISA y



Finding an Interest Rate

Julie deposits a certain amount of her tax refund into an account that earns 4% simple annual interest. After 6 months, the balance is \$2040. Find the principal.



http://bit.ly/2EEKBS9

### <u>Homework</u>

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#6, 8-16, 30, 35, 36