MATH 120 3.1 Simple Interest

Simple Interest Formulas (Given on the exam)

$$I = Prt$$
$$A = P + Prt$$

$$A = P(1 + rt)$$

I = interest

P = principal (present value)

r = annual interest rate in decimal form

t = time in years

A = amount after time (future value)

Examples

1. If \$24000 is loaned for 4 months at 10.5% annual rate, how much interest is earned?

2. How much interest will you have to pay for a credit card balance of \$1152 that is 1 month overdue, if a 13% annual rate is charged?

3.	A loan of \$26,000 was repaid at the end of 20 months. What size repayment check (principal and interest) was written, if an 4.3% annual rate of interest
	was charged?

4. A loan of \$890 was repaid at the end of 18 months with a check for \$915. What annual rate of interest was charged?

5. If you paid \$24 to a loan company for the use of \$1750 for 190 days, what annual rate of interest did they charge? 6. What is the purchase price of a 50-day T-bill with a maturity value of \$1186 that earns an annual interest rate of 3.562% (Assume a 360 day year).