

Name \_\_\_\_\_

Date \_\_\_\_\_

Mr. Tallman

**Homework #42 - Simple Interest****SHOW ALL WORK**

Problem	Work
1) A \$1,500 loan has an annual interest rate of $4\frac{1}{4}\%$ on the amount borrowed. How much time has elapsed if the interest is now \$127.50?	$I = 127.50$ $P = 1500$ $R = 4.25$ $T = X$ $I = PRT$ $127.50 = (1500)(.0425)(X)$ $127.50 = 63.75X$ $\frac{127.50}{63.75} = \frac{63.75X}{63.75}$ $X = 2 \text{ years}$
2) Philip takes out a student loan to pay for his college tuition this year. Find the interest on the loan if he borrowed \$2,500 at an annual interest rate of 6% for 15 years.	$I = X$ $P = 2500$ $R = 6\%$ $T = 15$ $I = PRT$ $X = (2500)(.06)(15)$ $X = \$2250$
3) The average weight of 6- to 11-year-old children increased from 65 pounds in the early 1960s to 74 pounds in 2000. What is the percent increase in weight, to the nearest percent?	$\text{Orig: } 65$ $\text{Change: } 9$ $\% = X$ $\text{Change} = \text{orig}(\%)$ $9 = \frac{65X}{65}$ $X = 13.8\%$ $13.8\% \text{ Increase}$
4) Logan bought a laptop for \$650 and a power adaptor for \$59. If the sales tax rate is 6%, what was the total tax that Logan paid? $650 + 59$ $\$709$	$\text{Orig: } 709$ $\text{Tax: } X$ $\% = 6\%$ $\text{Tax} = \text{orig}(\%)$ $X = 709(.06)$ $X = \$42.54$

