Week Lab Practice Quiz

1. $A = Pe^{rt}$

$A = 15000e^{.023(20)}$

$\boxed{A = \$23,761.11}$

this is the total in the account

interest would be:
$23,761.11 - 15000 = \$8,761.11$

this is just the interest made

2. $A = 6000\left(1 + \frac{.019}{4}\right)^{4(10)}$

$\boxed{A = \$7,252.23}$

b) interest $= 7252.23 - 6000 = \boxed{\$1,252.23}$

3. *this one is harder b/c it is decay

decay is always $n=1$

$A = P(1-r)^t$

$A = 25000(1-.03)^{12}$

$\boxed{A = \$17,346.06}$

4. * use your calc to guess & check w/ different t-values.

$A = P\left(1 + \frac{.03}{1}\right)^{1(t)}$

$16000 = 8000(1.03)^t$

.... plug in for t

t	A
12	11,406.09
17	13,222.78
22	15,328.83
23	15,788.69
24	16,262.35

btwn 23 & 24 yrs