## AA Unit 6 Review

1) Given the following sequence:

| n | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{t}_{\mathrm{n}}$ | 4 | -3 | -10 | -17 |

a) Write an explicit formula for it.
b) Convert the formula to function form.
2) Given the following sequence:

| n | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{a}_{\mathrm{n}}$ | 144 | -72 | 36 | -18 |

a) Write an explicit formula for it.
b) Rewrite the formula in function form.
3) Merric deposited $\$ 3,200$ in an account that pays $4.6 \%$ interest per year, compounded continuously.
a) Write a function to model this situation. b) When will the balance be $\$ 10,000$ ? Round your answer to the nearest year.
4) Waldo deposited $\$ 550$ in a savings account that pays $5.1 \%$ annual interest, compounded quarterly.
a) Write a function to model this situation.
b) When will the balance be 1,200 ? Round to the nearest year.

## AA Unit 6 (F.LE.A) POE\#2

When solving equations - answers should be given in the following way (moving on to the next form, when previous forms are not possible): 1) integers, 2) reduced improper or simple fractions, 3) decimals rounded to the nearest thousandth.

Solve each logarithmic equation.
5) $\log _{6} 78=3 x$
6) $\ln 4 x=3$

Answer: $\qquad$ Answer: $\qquad$
Solve problem \#7 by using a common base. Solve problem \#8 using logarithms.
7) $81^{5 x+4}=27$
8) $8^{3 x}=19$

Answer: $\qquad$ Answer: $\qquad$

Exemplary.
9) Solve for $x$. Round your answer to three decimal places. Show your work!
$\frac{620}{3-2^{X}}=5$

