

Algebra II, Quiz 11.1-11.2

1) Using the definition of logarithm, solve for  $x$ :  $\log(x)=3$

2) Solve using logarithm base 10 (you will need a calculator capable of finding logarithms):

a)  $65=10^t$

b)  $3 \cdot 10^t = 101$

c)  $126=10^{(t/3)}$

Solve, or state no real numbered solution if there is not a real numbered solution:

a)  $4^5=16^x$

b)  $(5/7)^z=(2/3)$

c)  $5 \cdot 2^p = 130$

d)  $802(1.029)^t = 1127(1.024)^t$

e)  $1700(1.045)^q = 2300(1.071)^q$