Math 3 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1-2 and 1-3 Practice

1. You are planning to take out a loan to pay for part of your post high school education. You need $12,000 and are shopping banks for the best loan deal. You have found 3 options:

Bank A 9.75% compounded yearly

Bank B 9.5% compounded monthly

Bank C 9.4% compounded continuously

1. Determine how much (round to the nearest penny) you would owe at the end of 1 year at each bank.

Bank A Bank B Bank C

1. Which bank will you choose for the best loan value?
2. Solve for x. **Show all work on a separate sheet of paper**.

**No calculator unless the problem is denoted with \***

1. logx(6x+7) = 2
2. 25x+2 = 1253x-6
3. 3(9x+1) - 9 = 72
4. 2x = 30 🡨\*
5. 
6. log7(X) = 5 🡨\*
7. 10(2x) = 52 🡨 \*
8. 3(2x + 4) = 350 🡨 \*
9. log3(5x + 2) = log3(4x + 8)
10. 
11. 
12. Farmer Jill is bragging to Farmer John about the size of her farm. She tells him her farm is 9 times bigger than his farm. John’s farm is 36.25 acres. Jill’s farm is 38.25 acres.

Show two different ways to prove that Jill is correct.