

Math 107 HW 6 Solutions

1. a) \$11,098.20
b) 8.3%. This can be found by looking at the (amount you have after 1 year- starting amount)/starting amount *100.
2. \$385,543.29, \$372,430.62
3. \$137,023.45, The amount of interest is $\$1,000,000 - \$137,023.45 = \$862,976.55$
4. Rosa has \$3649.96 after 5 years and \$6573.37 after 20 years
Julian has \$3190.70 after 5 years and \$6633.24 after 20 years.
5. Plan A you would need \$27,765.29 and Plan B would need a deposit of \$27,673.76.
6. a) Yes after 1 year you would have \$52,820.39 in the account, at this rate you could give a \$2,820.39 scholarship every year in perpetuity.
b) No, you would only have \$52,453.51 in the account and could only give \$2453.51.
c) An APR of 4.9% would work.
7. \$1,309,863 if the compounding was monthly. \$1,061,614 if the compounding was annually.