

1. Sam invested \$50,000 for 7 years that compounds interest quarterly. After the 7 years, he receives a check for \$67,405.33. What was the interest rate he received from the bank? (nearest .01%)
2. You invest \$7500 at 5.75% per annum compounded monthly. How much money will you have in 22 years?
3. How long will it take to quadruple your money in an account that pays 6.8% APR compounded daily?
4. How long will it take for an account to have \$75000 if its original deposit was \$18000 into a bank offering 4.9% interest compounded continuously?

Solve Algebraically.

5. $4^{2x} - 3 \cdot 4^x + 2 = 0$

6. $5^{1-2x} = 2^{x+1}$