Name Key
8A; Algebra 1

Date _____
Period _____

Do Now

1) Sue invested $1,000 at 6% per year compounded monthly. Find the value of Sue's investment after 5 years. Round to the nearest cent.

$A = P(1+r)^n$

$A = 1000\left(1 + \frac{6\%}{12}\right)^{60}$

$A = 1000\left(1 + \frac{.06}{12}\right)^{60}$

$A = 1000(1 + .005)^{60}$

$A = 1000(1.005)^{60}$

$A = 1348.850153$

$A \approx$

$1,348.85

nearest hundredth

12 × 5 = 60 # of months in 5 yrs

To figure out % per month

2) Mark opened a bank account. His starting balance was $600. If he receives a 2% interest per year compounded monthly, how much money would Mark have in his account after 3 years. Round to the earest cent.

$A = P(1+r)^n$

$A = 600\left(1 + \frac{2\%}{12}\right)^{36}$

$A = 600\left(1 + \frac{.02}{12}\right)^{36}$

$A = 600\left(1 + \frac{1}{600}\right)^{36}$

$A = 600\left(1 \frac{1}{600}\right)^{36}$

$A = 637.070109$

12 × 3 = 36

nearest hundredth

$637.07