Bell Work: Solve

1.)
$$5(3)^{6x-12} + 12 = 32$$

2.)
$$4\log_2(2x + 9) - 21 = 3$$

From Last Time

Page 251 # 13, 15, 19, 23, 29, 35, 38, 63, 67, 87, 97, 129

PRE-CALC TRIG

Day 26

3.5 Exponential and Log Models

Objectives: To apply and solve real life problems involving exponential and logarithmic equations

Formulas

Exponential Growth: $y = ae^{bx}$

Exponential Decay: $y = ae^{-bx}$

Compound Interest Formula: $A = P(1 + \frac{r}{n})^{nt}$

Compound Continuously Formula: $A = Per^t$

Example

You have \$200 to deposit. Your bank has two options for your investment. You can either put it into an account with 5.2% interest compounded continuously or an account with 5.6% compounded monthly. How long will it take for each account to triple your money, and which account are you more likely to pick? Why?

For Next Time

Page 262 #15, 17, 21, 43, 59, 61