7.2

p.30

pg. 30-31 Continuously Compounded

Interest

Warm-up:

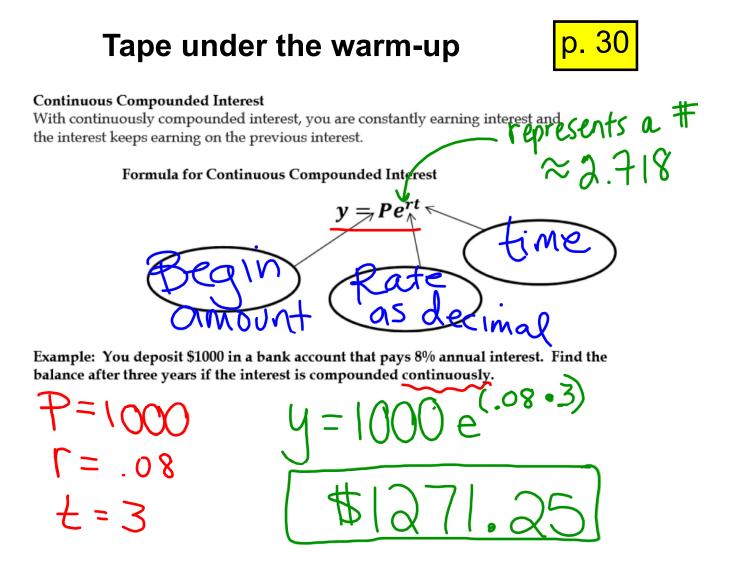
Exponential growth/decay:

A car depreciates 10% each year. If you bought this car today for \$5000, how much will it be worth in 7 years?

$$y = P(1-r)^{t} \qquad p = 5000$$

$$y = 5000(1-.10)^{T} \qquad t = .10$$

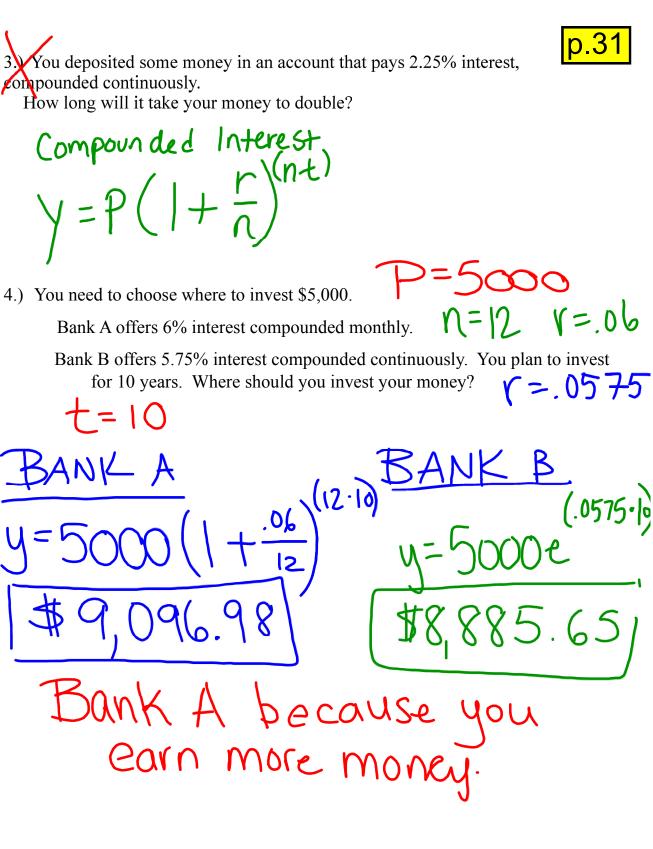
$$y = $2,391.49$$



p.31 1.) Find the amount of money you would have after 10 years if you invested \$15,000 at a rate of 1,75%, compounded continuously. (.0175.10)ρ

2.) Find the amount of money you would have after 4 years if you invested \$20,000 at a rate of 3.5%, compounded continuously.

(.035.4)



Practice time: Homework worksheet