

#Jenny



Finally I get this ebook, thanks for all these I can get now!

#Rio



Cool! I'am really happy

#Markus Jensen



I did not think that this would work, my best friend showed me this website, and it does! I get my most wanted eBook

#Hun Tsu



wtf this great ebook for free?!

#Che Salsa



My friends are so mad that they do not know how I have all the high quality ebook which they do not!

#Diego Butler



so many fake sites. this is the first one which worked! Many thanks

Chapter 5 Section 5 Making Connections: Exponential Models  
Chapter 5 Section 5 Question 1 Page 209

a)  $S(t) = 100e^{-0.05t}$   
 $75 = 100e^{-0.05t}$   
 $\ln(0.75) = -0.05t$   
 $t = \frac{\ln(0.75)}{-0.05}$   
 $t \approx 0.693$   
The drug concentration is 0.053 mg/mL.

b)  $\frac{dN}{dt} = 100e^{-0.05t}$   
 $\ln(0.5) = -0.05t$   
 $t = \frac{\ln(0.5)}{-0.05}$   
 $t \approx 13.86$   
The half-life is 13.86 min.

c)  $S(t) = 100 \left( \frac{1}{2} \right)^{\frac{t}{13.86}}$   
 $= 100 \left( \frac{1}{2} \right)^{\frac{10}{13.86}}$   
 $= 100 \left( \frac{1}{2} \right)^{0.7216}$   
 $= 100 \left( \frac{1}{2} \right)^{0.7216}$

d)  $S'(t) = -4.9e^{-0.05t}$   
 $S'(5) = -4.9(0.7788) \approx -3.816$   
 $\approx -2.65$   
The sample is decaying at 2.65 mg/min after 5 min.

[Download PDF version of :](#)  
**Mhr Calculus And Vectors 12 Solutions Chapter 2**