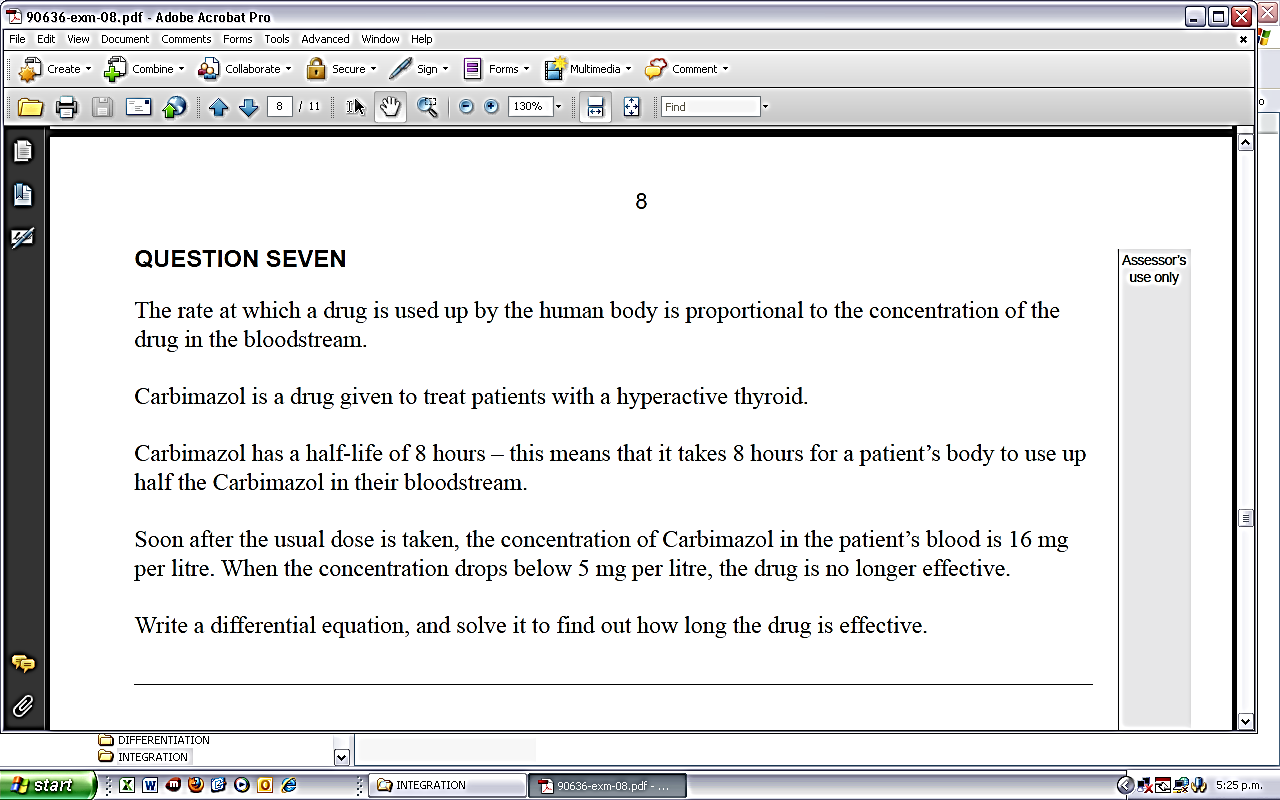
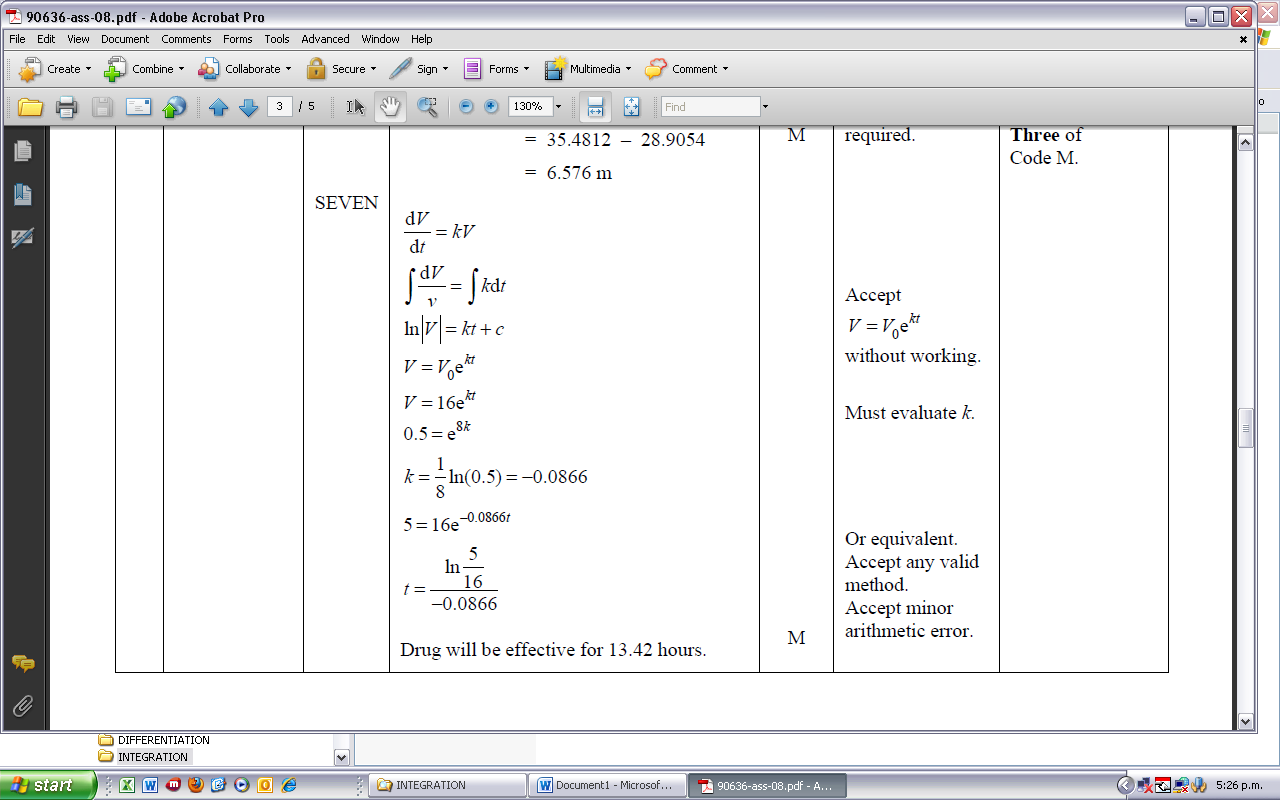
4



***Let V = amount of Carbimazol at time t***



***When t = 0, V = 16 so ln(16) = 0 + c***

***So ln V = kt***

***16***

***When t = 8, V = 8 so ln ( 0.5 ) = 8k so k = - 0.0866***

***ln V = - 0.0866t***

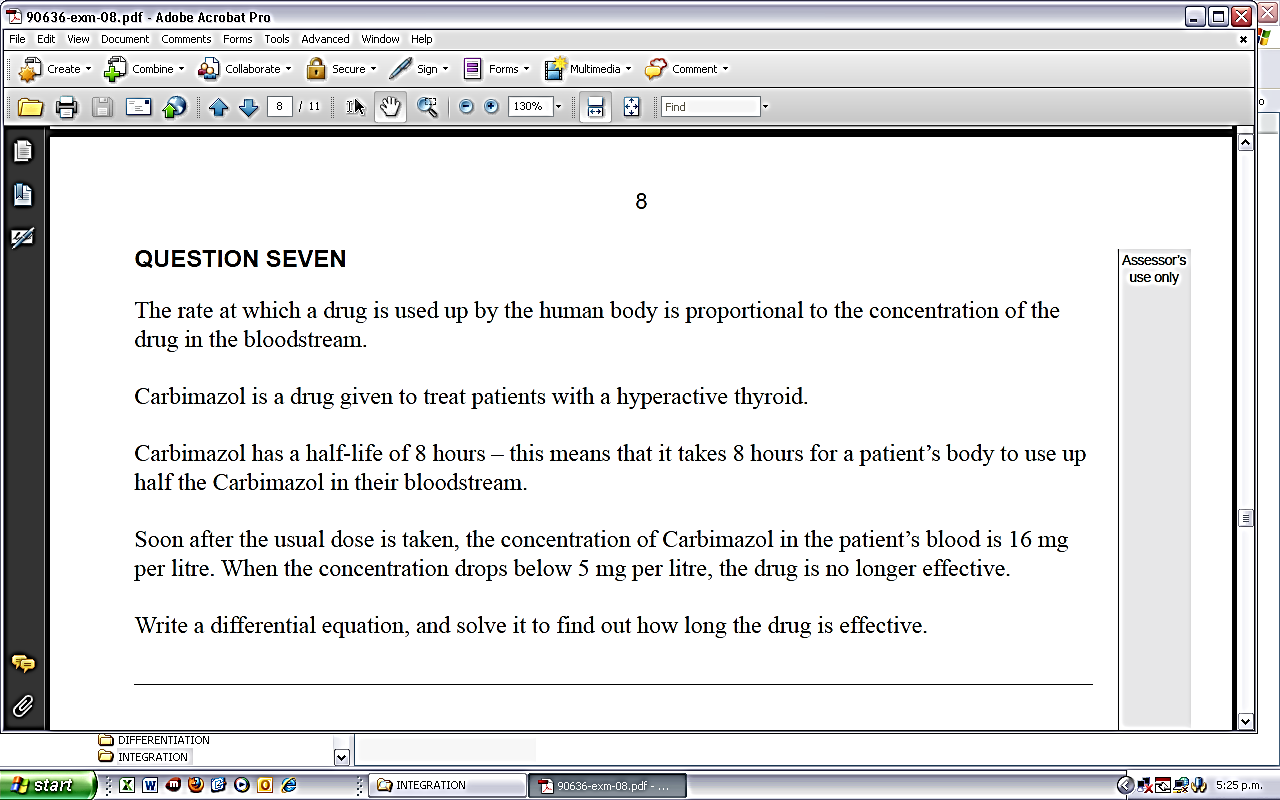
***16***

***If V = 5, ln 5 = - 0.0866t so t = 13.43 hours***

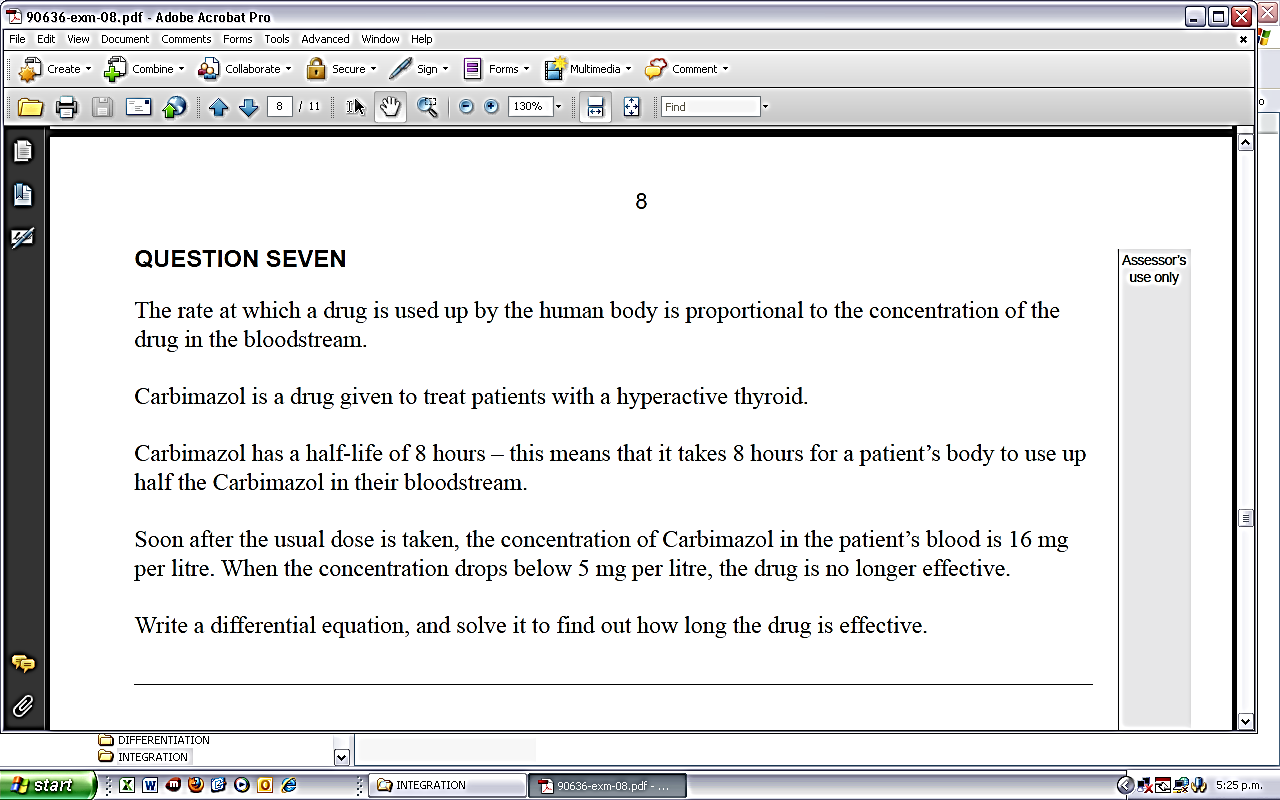
16

***Drug will be effective for nearly 13½ hours.***

4



4



4

