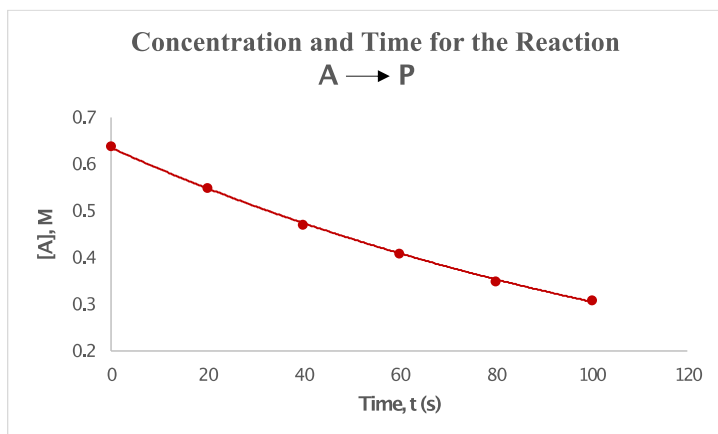


Reaction Rates

1. Consider the following plot.



Time, t (s)	[A], M
0	0.64
20	0.55
40	0.47
60	0.41
80	0.35
100	0.31

a) Calculate the rate of reaction from 20 to 80 seconds.

b) Calculate the rate of reaction from 0 to 100 seconds.

c) What is the instantaneous rate at 60 seconds?

d) What is the initial rate of reaction?

2. Write the rate expression in terms of reactants and products for the following reaction. What is the rate of appearance of $MnSO_4$ if the rate of disappearance of $FeSO_4$ is 0.41 M/s ?

