

STAT 479
Quiz 6
Spring 2020
April 21, 2020

1. During 2019, The Jordan Stop Loss Insurance Company collect the following premium amounts:

Month	January	April	July	October
Premium Collected	1,000,000	960,000	780,000	800,000

All premiums are paid on the first day of the month and all premiums are annual premiums.

Hayley, the company's actuary, expected a loss ratio of 62.5%.

During 2019, the company paid losses for claims incurred in 2019 of 1,100,000.

Use the loss ratio method to determine the reserves that should be held on December 31, 2019.

2. You are given the following Paid Claims triangle:

Cumulative Loss Payments by Development Year					
Accident Year	Development Year				
	0	1	2	3	4
2015	50,000	125,000	145,000	155,000	157,500
2016	70,000	170,000	200,000	212,000	
2017	90,000	210,000	250,000		
2018	100,000	235,000			
2019	125,000				

There is no further development after year 4.

Calculate the loss reserve on December 31, 2019 using the chain ladder method with volume weighted average loss development factors.