https://phoenix-documentation.readthedocs.io/en/latest/ch16_ClosedLoop.html#calculating-feed-forward-gain-kf

775pro	Motor Used	CTRE Magnetic	Encoder Used
12.6.2. Motion Magic Closed-Loop Walkthrough – Collect Sensor Data – Java			
113300	units per 100ms		
27.66113281	Rev per 100ms	4096	Feedback Native Units
16597	RPM		
Sanity check (Motor RPM)			
18730	Motor RPM		
1	Gear Box ~ratio* * at the encoder		
18730	~ mesured RPM		
12.6.3. Motion Magic Closed-Loop Walkthrough – Calculate F-Gain – Java			
0.009029126214	F-gain = (100% X 1023) / units per 100ms		
		1023	=~1024
12.6.4. Motion Magic Closed-Loop Walkthrough – Initial Cruise-Velocity/Acceleration – Java			
Initial Cruise-Velocity (arbitrarily% * units per 100ms)			
0.4	% of the top speed.		
45320	Initial Cruise Velocity		
Initial acceleration value (arbitrarily acceleration is in terms of change in velocity per second			
1	Sec		
45320	Initial acceleration		
12.6.5. Motion Magic Closed-Loop Walkthrough – P-Gain – Java			
60304	Given an error		
10%	% of motor output can start typically at 10%		
0.001696404882	P-gain = (% motor output X 1023) / (error)		
Sanity check (error * P-gain) / % motor = 1023			
		1023	=~1023
*Tune P-Gain			
0.01	Final P-gain Value		
12.6.6. Motion Magic Closed-Loop Walkthrough – D-Gain – Java			
10	D-gain can start typically at 10 X P-gain		
0.1	D-Gain		
12.6.7. Motion Magic Closed-Loop Walkthrough – I-Gain – Java			
0.001	I-gain if required start ~.001		

Enter User Data				
Returned Data				
Sport 57	lower chain to Upper	10 turn Pot		
80 : 1 X	28 : 22	X 10		
80	1.272727273	10	1018.181818	