

Raw Data Sheet

Student Name: _____

Team members:

1.- _____ 2.- _____

3.- _____ 4.- _____

Instructor: _____

Precession Exercises

Provide description of your observations.

a.

b.

c.

d.

Nutation and Precession Exercises

Observationally confirm the following cases.

Case a.

Case b.

Case c.

Measuring Precession Rate

Lever arm, d _____ (cm)

Golden mass, m_g _____ (kg)

Table 1.- Columns left to right: trial number; initial disk spin frequency; final disk spin frequency; period of the precession around the vertical axis

Trial	f_i	f_f	T(s)
1			
2			
3			
4			
5			
6			

Note: Remember to divide f_i and f_f by 4 to obtain RPM – refer to page 63 of the lab manual.

Measuring Experimental k Value

Hanging Mass, $m = 0.10$ kg Hub Diameter, $D_{\text{hub}} =$ _____ (cm).

Disk Mass, $M = 1.73$ kg Disk Diameter, $D =$ _____ (cm).

Table 1.- *Frequency* for various trials

	Trial 1	Trial 2	Trial 3
f			

Note: Remember to divide f by 4 to obtain RPM – refer to page 65 of the lab manual.