

Unit 3 – Rotational Dynamics

DAY	Lab or Activity	Student worksheet	Suggested approach	Homework	Follow-up	Assessment
1	More Rotational Kinetic Energy	3:1 (R-3)	begin as homework, finish in class	assign M-23 and textbook problem	assign #6 on R-3	exchange papers and grade in class
2	Integrating $\sin^3 x$ by "Substitution"	3:2 (M-23)	begin as homework, finish in class	assign R-4 and textbook problem	Distribute Rotational Motion Review Sheet	exchange papers and grade in class
3	Kinetic Energy of a Thrown Stick	3:3 (R-4)	begin as homework, finish in class	assign R-5 and textbook problem	assign #6 on M-23	
4	Kinetic Energy of a Rolling Object	3:4 (R-5)	begin as homework, finish in class	assign R-6 and textbook problem		exchange papers and grade in class
5	Parallel-Axis Theorem	3:5 (R-6)	begin as homework, finish in class	assign R-7 and textbook problem	continue Eq-6	exchange papers and grade in class
6	Rolling Race	3:6 (R-7)	theory first, then experiment	assign R-8 and textbook problem		exchange papers and grade in class
7	The Rotational Inertia of a Wire Arc	3:7 (R-8)	begin as homework, finish in class	assign M-24 and textbook problem	continue Eq-6	contest
8	Introducing Vector Products	3:8 (M-24)	begin as homework, finish in class	assign R-9 and textbook problem		exchange papers and grade in class
9	Inventing Angular Momentum	3:9 (R-9)	begin as homework, finish in class	assign R-10 and textbook problem		exchange papers and grade in class
10	Another Example Of a Cross-Product	3:10 (R-10)	begin as homework, finish in class	assign R-11 and textbook problem		exchange papers and grade in class
11	Precession Experiment	3:11 (R-11)	begin as homework, finish in class	assign R-12 and textbook problem		exchange papers and grade in class
12	Angular Momentum of a Satellite	3:12 (R-12)	begin as homework, finish in class	assign SHM-1 and textbook problem	continue Eq-6	