Quizbit Rubric | Rotational Mechanics | Cycling

	Rubric item		Description	Points (Circle One)
Completeness	Relevant physics	High level	Uses relevant physics in solution attempt	6
		Mid level	Some, but not all physical concepts used are relevant to the situation	4
		Low level	Physical concepts are mentioned	2
	All parts attempted	High level	All parts of problem have significant effort shown	6
		Mid level	Some parts of problem have significant effort shown	4
		Low level	Some parts of problem are started	2
Clarity of Communication	Legibility	High level	All parts of solution are legible	6
		Mid level	Some parts of solution are hard to read	4
		Low level	Significant parts of solution are hard and/or impossible to read	2
	Format	High level	Solution is highly organized and leads the reader through from start to finish in a logical, easy to follow manner	6
		Mid level	Solution is mostly organized, but it is necessary to hunt for important pieces	4
		Low level	Path of solution is hard to follow. Important pieces of solution are scattered and unlabeled.	2
Correctness	Physical Representation	High level	Extended free-body diagram complete with forces acting where they are applied and lever arms from the choosen axis to the location of the force.	4
		Low level	Extended free-body diagram that is attempted but incomplete.	2
	Finding torque angles	High level	Vector operation diagram (or something equivelent) is used show how the angles in the torque equation are determined.	4
		Low level	Attempted to find the angles.	2
	Identifying the 2nd Law	High level	The 2nd Law equation - the sum of the torques equal to I*alpha is present. Correct torques (forces) are identified. Alpha is set to zero. (This is NOT for applying the torque equation for individual torques correct, just the big picture)	8
		Mid level	The sum of the torques is present but not complete (missing alpha is zero, or some torque like friction missing)	5
		Low level	They add things together at some point.	2
	Friction	High level	The friction force is equal to the coefficient of friction times the normal force.	4
		Low level	Friction is present but it not accounted for correctly.	2
	Application of the 2nd law and answer	High level	The individual torques are all applied properly and 2nd law is solved for the coefficient of friction correctly.	4
		Mid level	Most (or all) of the indivudal torques look correct, and algebra was peformed to find the coefficient of friction, but the answer is not correct.	3
		Low level	An attempt to find the individual torques was made.	2
			Total:	