N	Name:				
H	ydraulic Arm fra	me			
		Free Standing	Articulating Motion on all 4 joints	Scaled up from original size to match sheet layout	Construction appearance
		5 pts	10 pts	20 pts	5 pts
	Totals				

Hydraulic Arm Movement

	Joint 1	Joint 2	Joint 3	Joint 4
	(x- axis)	(z-axis)	(y-axis)	(endeffector)
	5pts	5 pts	5 pts	5 pts
Totals				

Hydraulic Arm Testing

	Rotational	Vertical Motion	Forward Reach	Gripper
	Motion Test	Test	Test	Extension test
	(x-axis)	(z-axis)	(y-axis)	(endeffector)
	10 pts	10 pts	10 pts	10 pts
Totals				

Data Collection

X-axis

Trial 1 Input 10 ml Output Distance covered	Trial 2 Input 10 ml Output Distance covered	Trial 3 Input 10 ml Output Distance covered
	————	————

Calculate % efficiency between trail 1 and trail 3

z-axis

Trial 1	Trial 2	Trial 3
Input 10 ml	Input 10 ml	Input 10 ml
Output	Output	Output
Distance covered	Distance covered	Distance covered

Calculate % efficiency between trail 1 and trail 3

y-axis

Trial 1	Trial 2	Trial 3
Input 10 ml	Input 10 ml	Input 10 ml
Output	Output	Output
Distance covered	Distance covered	Distance covered

Calculate % efficiency between trail 1 and trail 3

End effector

Trial 1	Trial 2	Trial 3
Input 10 ml	Input 10 ml	Input 10 ml
Output	Output	Output
Distance covered	Distance covered	Distance covered

Calculate % efficiency between trail 1 and trail 3

Graph the results as a line graph. Using the graph predict what would happen in trial 4.

^{*}Bonus*(15 pts on quiz grade)