## Milestone 1 Newtonian Mechanics Part 1 Of 3 Try [\_\_]

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## 考試注意事項 INSTRUCTIONS TO STUDENT

- 1. 除非考試開始否則不要翻開試卷。Do not open this booklet until you are told to do so.
- 2. 所有的電子產品是禁止的。Electronics, e.g. handphones, calculators, are prohibited.
- 3. **談話被禁止** 如果你作弊 你會得到零分 No talking. Cheating or attempting to cheat on an exam paper is a serious offense. Students caught cheating or attempting to cheat will receive ZERO on this exam paper.
- 4. 請用原子筆作答,不能使用鉛筆。Use a pen. Do not use a pencil.
- 5. 答案請寫在試卷上。Write all answers in this examination booklet.
- 6. 本試卷包含有 3 個問題 2 頁。This paper consists of 2 pages with 3 questions.
- 7. 考試時間 30 分鐘。You have a total of 30 minutes to complete this paper.
- 8. 當你寫完論文,舉起你的手,等待考試的主管來收集你的論文。 When you finish the paper, raise your hand and wait for the exam supervisor to collect your paper.
- 9. 現在填寫您的姓名(中國與英文),學號。 Fill in your Name and Student ID now. (I will fill in your mark.)

名字						
Name						
學號	0	1	0			
Mark	1		2	3	Σ	

## "To Him Who Is Above And Beyond All"

修改:中華民國 104年12月17日12時04分22秒

1. (kinematics) Draw a <u>Motion Diagram</u> for the Ball (●). Identify key points (denote as ■) at which the nature of the motion changes. Include the relevant vectors along the path (velocity and acceleration).

## 2. (kinematics) Draw a set of <u>graphs</u> (s(t),v(t),a(t)) describing the motion along the track. Use the same time axis but different colors.

s, v, a

time

3. (dynamics) Draw <u>Free Body Diagrams</u> illustrating the forces on the ball be at, and between, the key points you identified in part 1. (Include a coordinate system) (Depending on the demonstration, you may not need all the boxes)

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The End: Please go to computer lab!

J D White,Translated by , 普通物理 General Physics (1)(physics/test/ms1a.odt) pg. 2/2