| Test 2 — Outline (Revised 9/27/19) | |
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| Course Information: Phys 2A | Instructor Name: John R. Walkup |

### Equations Provided

***d*** = ***v***o*t* + (1/2)***a****t*2 ***v*** = ***v***o + ***a****t*  ***F***net = *m****a*** ***F***g = *m***g** *F*fr ≤ s*N*  *F*fr = k*N*

Use *g* = 10 m/s2 *WC = –*PE *WNC =* E *Wnet =* E *W* = *Fd*cos*mv*2 PE = *mgh s* = *r* *v* = *r* *a*t = *r* *a*c = *v*2/*r* net = *I*  = o + *t*  = o*t* + (1/2)*t*2

### Multiple-Choice Questions

1. This question will center on understanding the vector property of velocity or acceleration.
2. A problem from Assignment “1-D Motion.”
3. A problem from Assignment “1-D Motion.”
4. Problem 2, 3 or 4 from Assignment “Projectile Motion & Beg. Newton’s Laws”
5. Problem 9, 10, or 11 from Assignment “Projectile Motion & Beg. Newton’s Laws”
6. Problem 7, 8, 9, or 10 from Assignment “Forces and Basic Newton’s 2nd Law.”
7. Problem 7, 8, 9, or 12 from Assignment “Work & Beg. Energy”
8. A problem from Assignment “Review Newton’s Laws.”
9. A problem from Assignment “Review Newton’s Laws.”
10. A problem from Assignment “Review Newton’s Laws.”
11. The refrigerator problem involving pushing a refrigerator across a rough floor.
12. TBD
13. TBD
14. Wild card

### Free Response Problems

1. This is the two-body problem we did in class where two matches are attached to a string, with one mass hanging over the edge of a table. This problem could involve friction.
2. The dragster problem.
3. Wild card