General announcements

- *Calendar* was updated two days ago – check it!
- *Don't forget* to look at the XtraWrk for helpful videos, problems to consider, etc.
- *Today:* 1D kinematics lab, how to write up a physics lab, and finishing up the kinematic equations

Fun and games with 1-D kinematics Lab

- *General info:*
  - Lab handout and lab procedure is on Website (no need to print unless you want to)
  - We will talk about write-up format before you leave (and maybe even start it together)
  - Do not use the data posted on Website unless you have permission from me - use what you get today
- *Make sure* everyone in your group has their own copies of the graphs BEFORE you leave!

Lab write-up for L-1

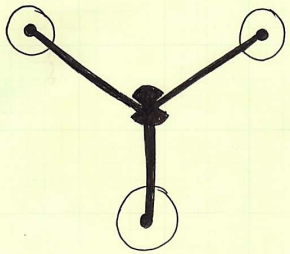
- Use the template, or recopy similarly to the engineering pads you just received (these are to be used for all labs, please)
- For all labs, “blurb” your answers to the analysis questions. Make sure you number to match the lab questions!
- Attach all data tables and/or graphs to the back.
  - If taking data from a graph, make sure to circle and label the data points used every time
- Same format for every lab’s cover sheet – feel free to illustrate!

LATE N/A

BACK TO THE FUTURE

WITH OUR HANDY

FLUX CAPACITOR



Olivia Hudnut
Partner: Alexis Genske
H. Physics, P. C
3/14/12
Lab 28

DAYS LATE: 0

AP PHYSICS
FRIDAY LAB
E PERIOD

tHE potentiaL and eLectricaL fieLds of a fLat, finite, conducting disk
a.k.a.

HELLLL!

(L-15)

Put out the flames, quick before Pearlie is burned to a bacon-like crisp!

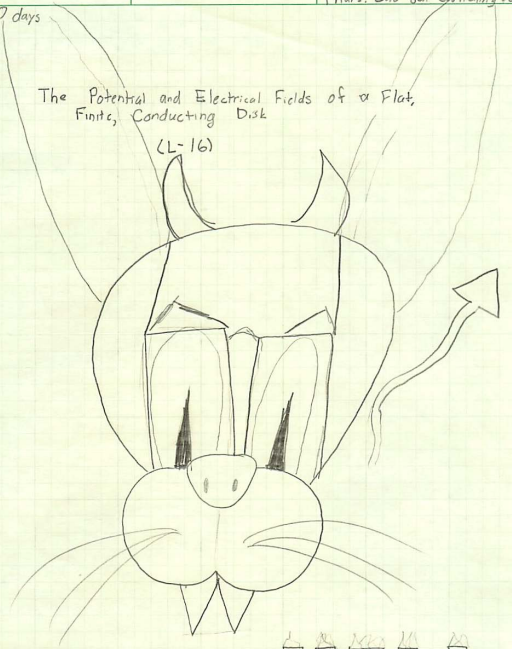
PEARLIE JEFFERS
PARTNERS: YALL
MARCH 11, 1998
HELP FROM: FRICKA

AP Physics
B Period
Thurs. Lab but switching to Fri.

Late: 0 days

The Potential and Electrical Fields of a Flat, Finite, Conducting Disk

(L-16)



The ORIGINAL lab from HELL

Hannah Frank
Partner: everyone and no one
February 21, 2005
Help from: Mr. White

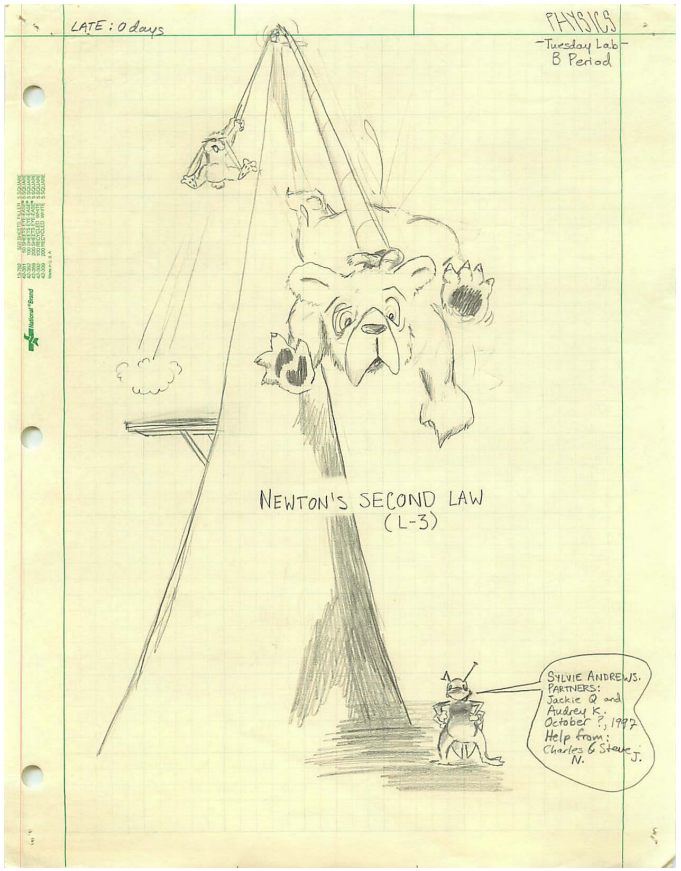
ADVANCED PHYSICS —
THURSDAY LAB
— PERIOD 8 —

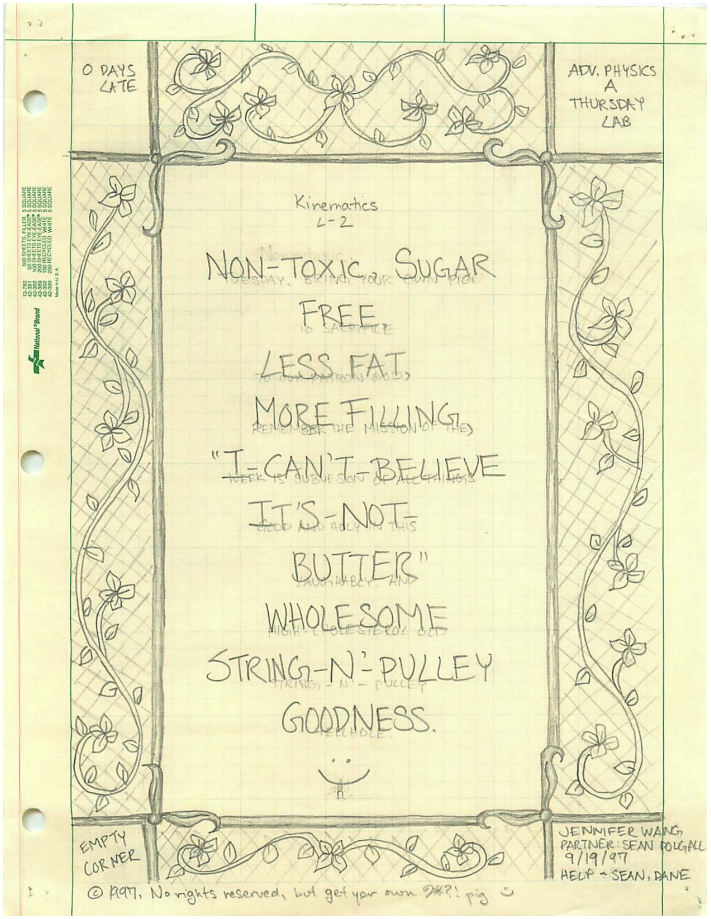
LATE: 0 DAYS

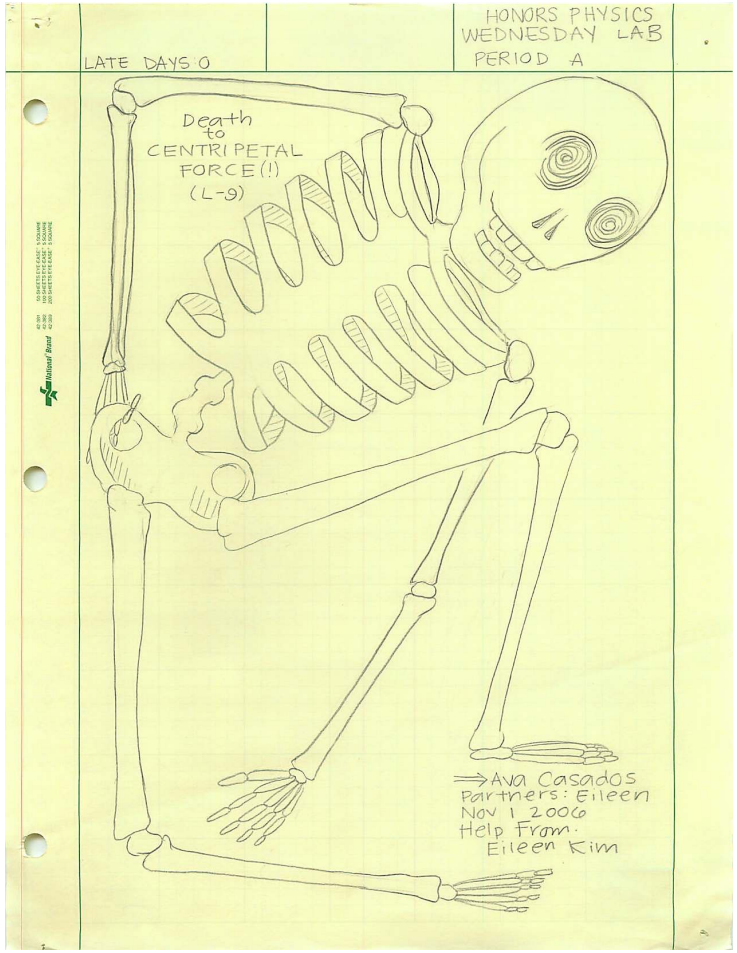
FREE FALL WITH FRICTION

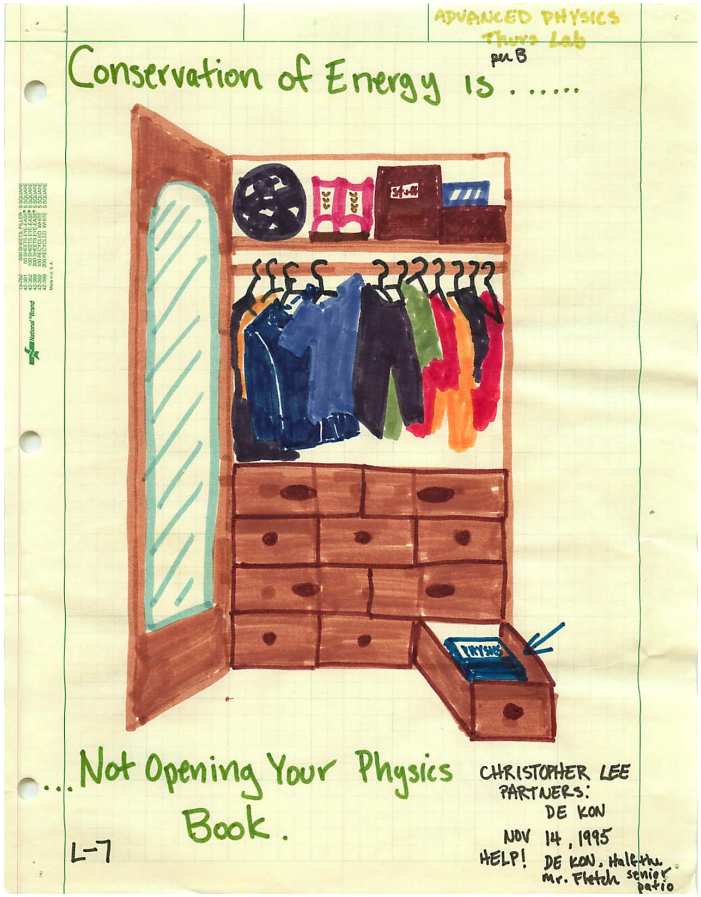
TOM PETTY AND THE HEARTBREAKERS PERFORM ONE OF THEIR LESS KNOWN HITS: "FREE FALLING WITH FRICTION"

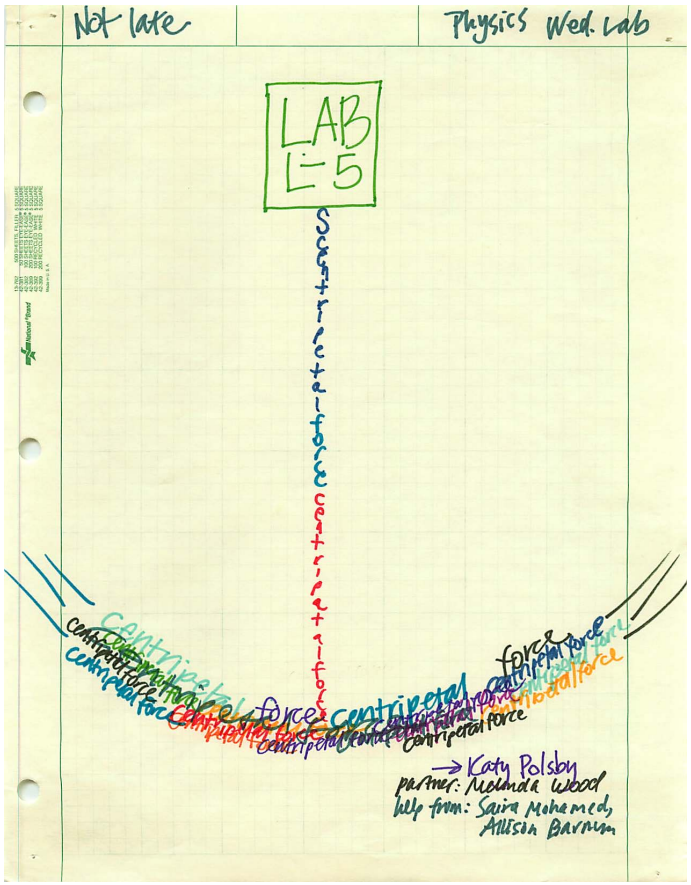
→ PRADIP CHANDRASOMA
PARTNER: KELLY THOMPSON
OCTOBER 20, 2004
HELP FROM: SCOTT CHACON

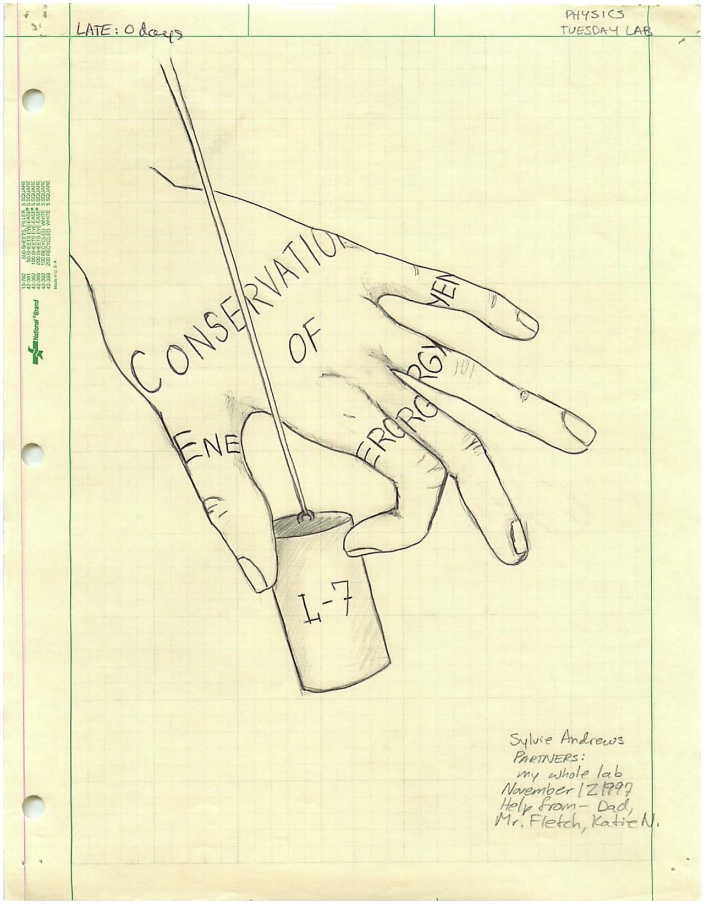

LATE: 0 days
PHYSICS
-Tuesday Lab-
B Period
NEWTON'S SECOND LAW
(L-3)
SYLVIE ANDREWS.
PARTNERS:
Jackie Q and
Audrey K.
October ?, 1997
Help from:
Charles G Steve J.
N.

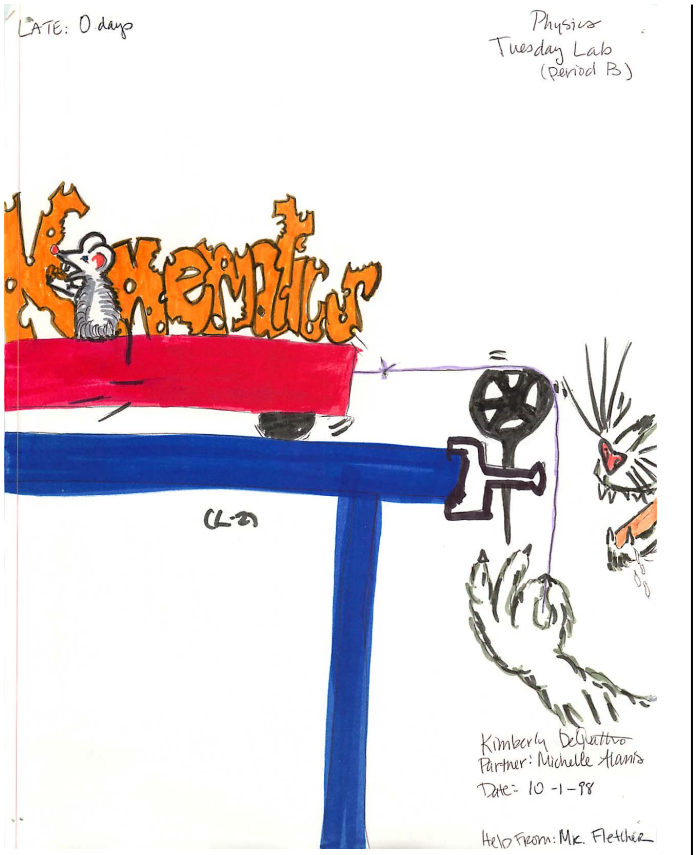

0 DAYS
LATE
ADV. PHYSICS
A
THURSDAY
LAB
Kinematics
L-2
NON-TOXIC, SUGAR
FREE,
LESS FAT,
MORE FILLING,
"I-CAN'T-BELIEVE
IT'S-NOT-
BUTTER"
WHOLESOME
STRING-N'-PULLEY
GOODNESS.
EMPTY
CORNER
JENNIFER WANG,
PARTNER: SEAN POUGALL
9/19/97
HELP = SEAN, DANE
© 1997, No rights reserved, but get your own pig!

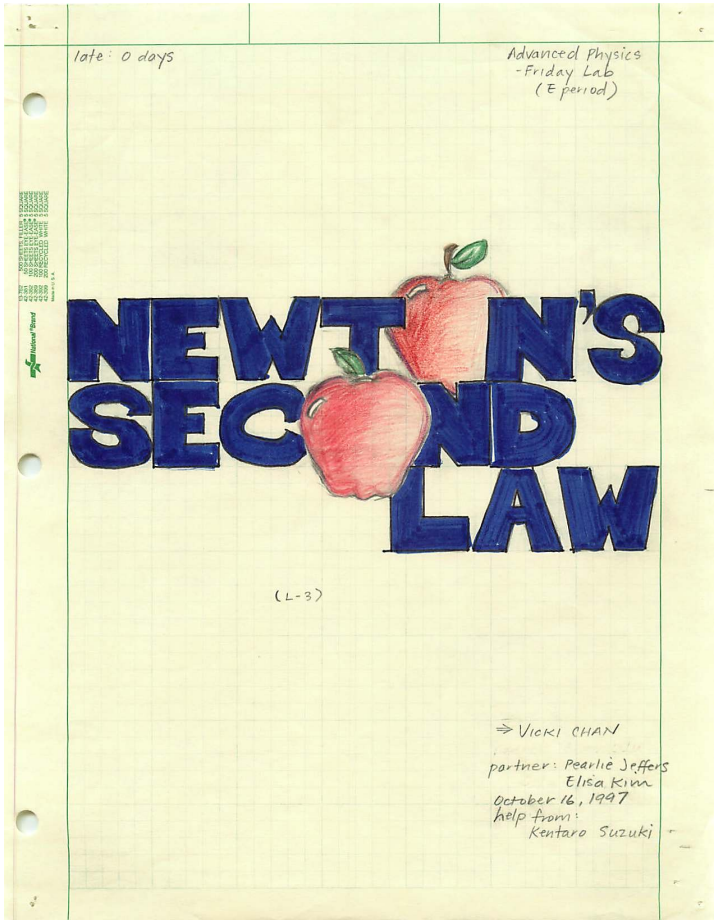

LATE DAYS 0
HONORS PHYSICS
WEDNESDAY LAB
PERIOD A
Death
to
CENTRIPETAL
FORCE (!)
(L-9)
⇒Ava Casados
Partners: Eileen
Nov 1 2006
Help From:
Eileen Kim


ADVANCED PHYSICS
Thurs Lab
pm B
Conservation of Energy is . . . . .
...Not Opening Your Physics
Book.
L-7
CHRISTOPHER LEE
PARTNERS:
DE KON
NOV 14, 1995
HELP! DE KON. Hall+Mr.
Mr. Fletch senior
patio

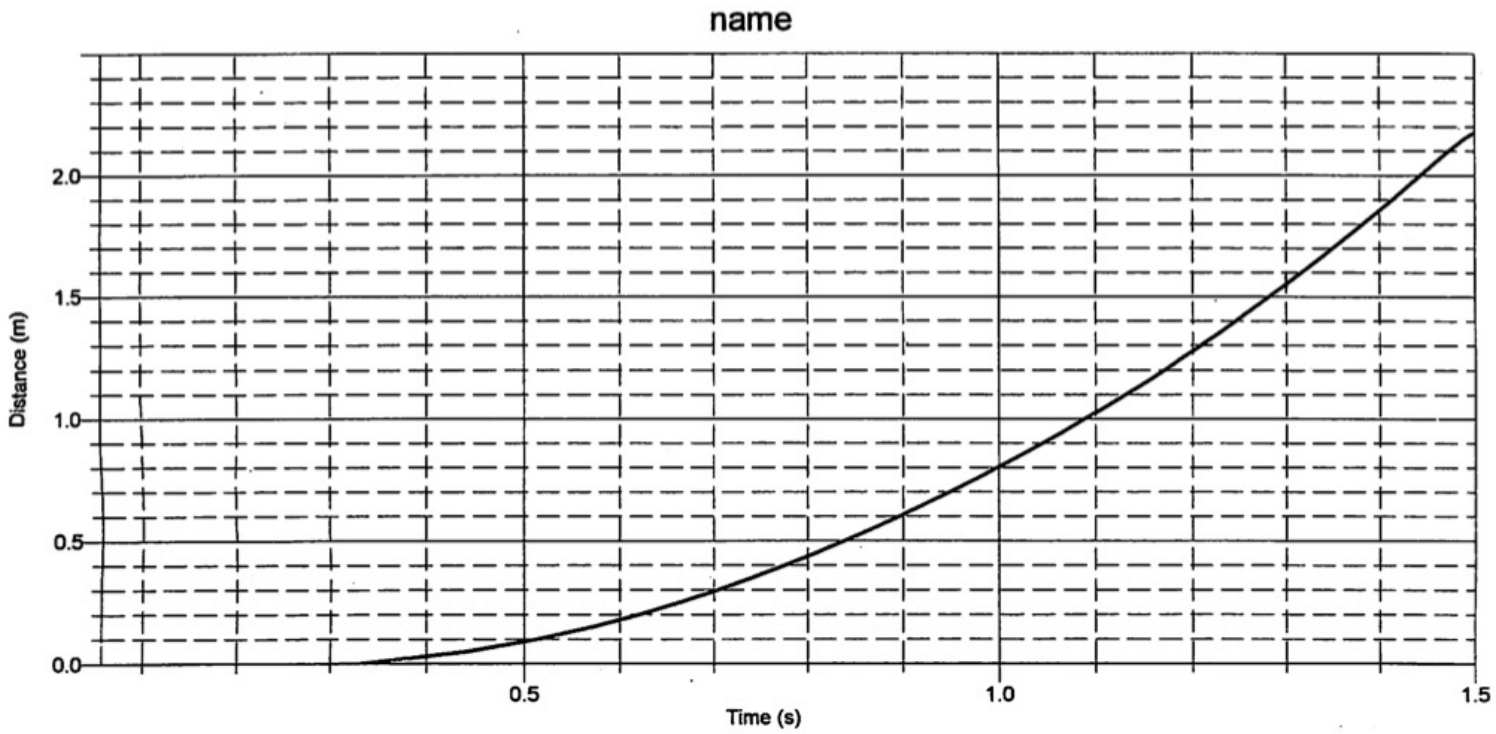

Not late
Physics Wed. Lab
LAB
L-5
centripetal force
Katy Polsby
partner: Melinda Wood
help from: Saira Mohamed,
Allison Barnum


LATE: 0 days
PHYSICS
TUESDAY LAB
CONSERVATION
OF
ENERGY
L-7
Sylvie Andrews
PARTNERS:
my whole lab
November 12 1997
Help from- Dad,
Mr. Fletch, Katie N.


LATE: 0 days
Physics
Tuesday Lab
(Period B)
Kimberly DeQuattro
Partner: Michelle Adams
Date: 10-1-98
Help From: Mr. Fletcher


late: 0 days
Advanced Physics
-Friday Lab
(E period)
NEWTON'S SECOND LAW
(L-3)
⇒ VICKI CHAN
partner: Pearlie Jeffers
Elisa Kim
October 16, 1997
help from:
Kentaro Suzuki

Sample data



Sample data

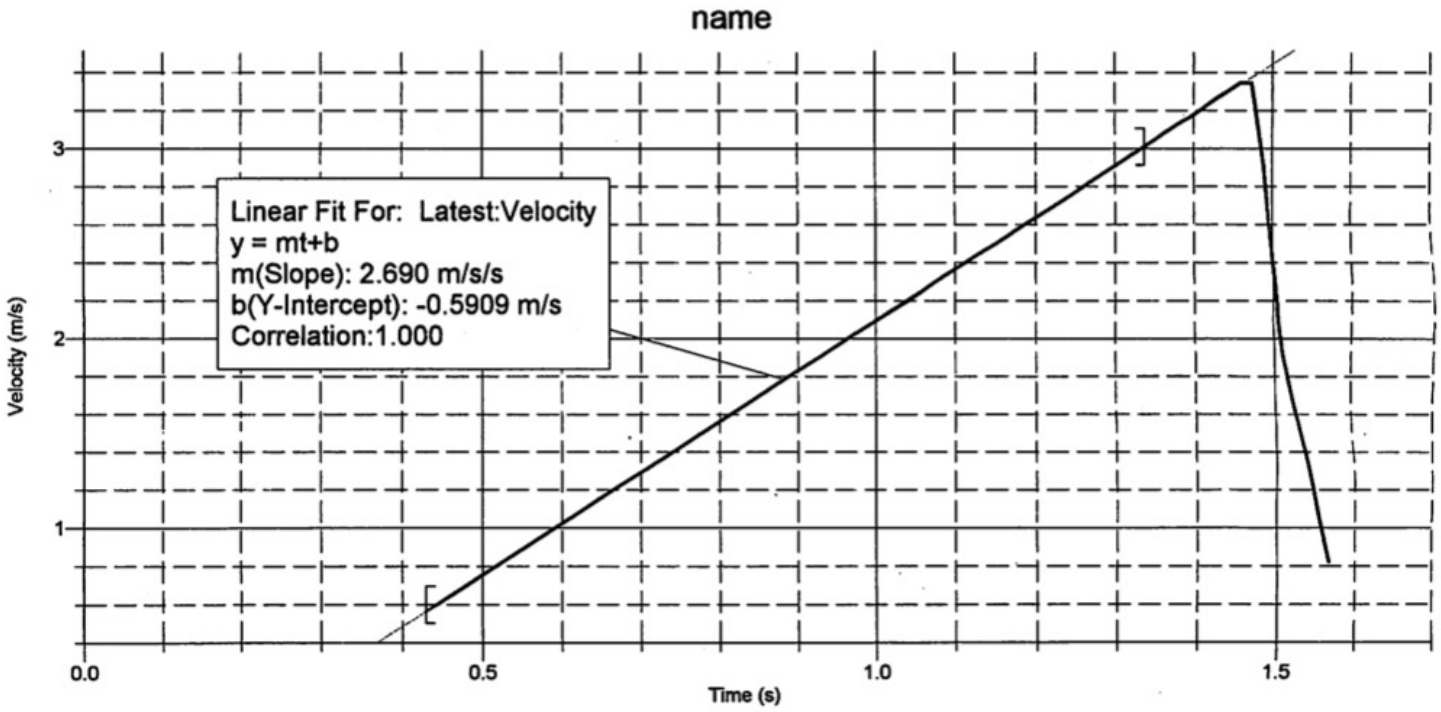
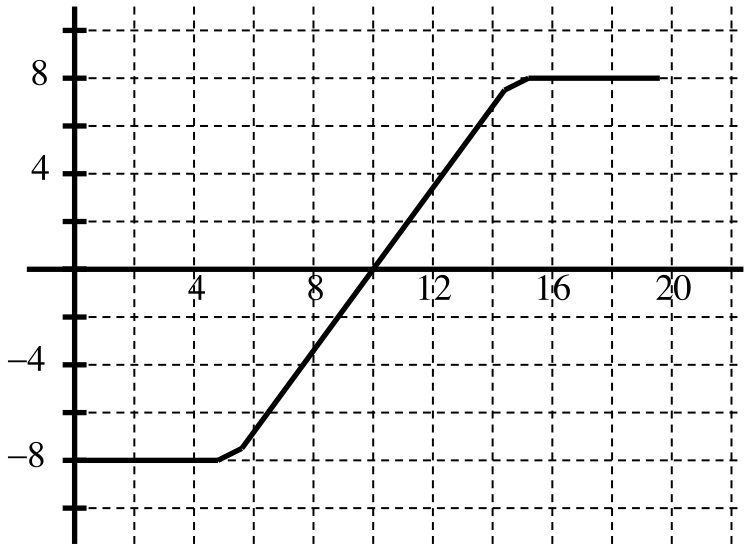
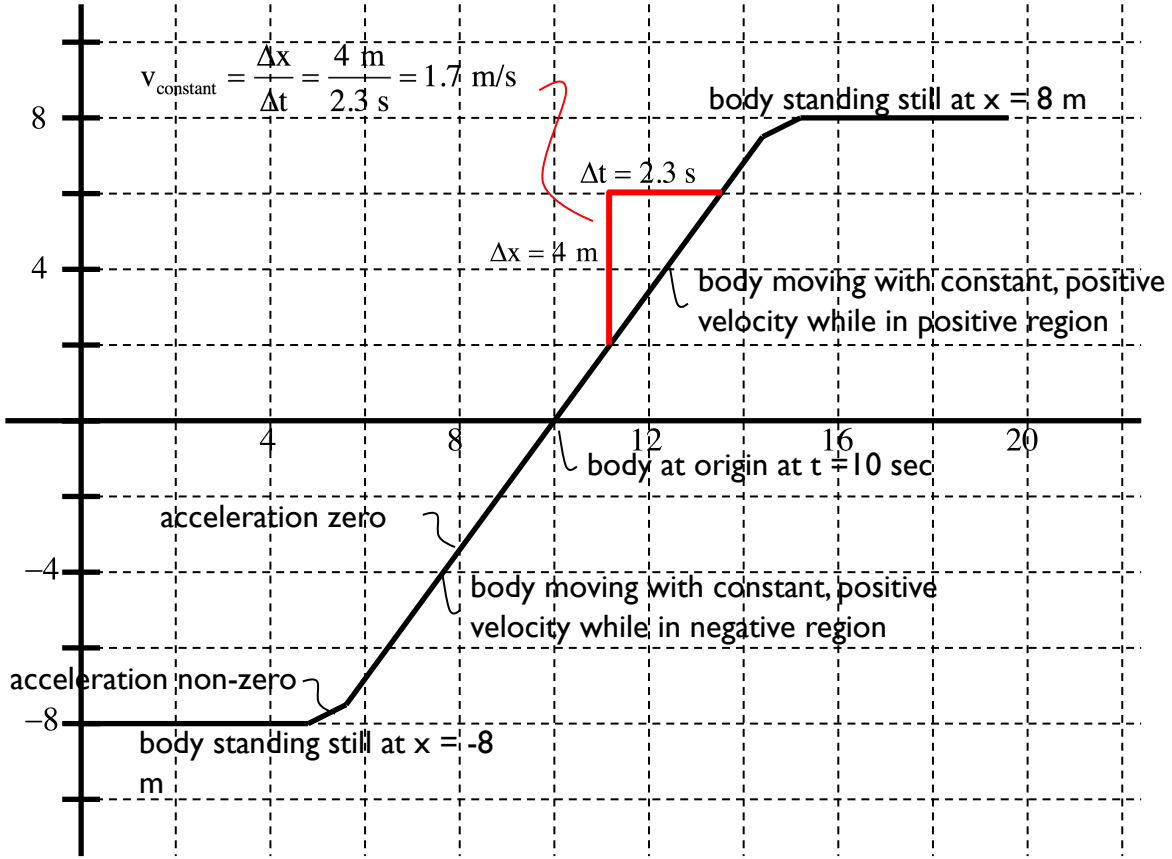

name
Linear Fit For: Latest:Velocity
y = mt+b
m(Slope): 2.690 m/s/s
b(Y-Intercept): -0.5909 m/s
Correlation:1.000
Velocity (m/s)
3
2
1
0.0
0.5
1.0
1.5
Time (s)

Figure 2.24 from XtraWrk

- What does this graph represent if it is a:
- Position vs. time graph?
- Velocity vs. time graph?
- Acceleration vs. time graph?

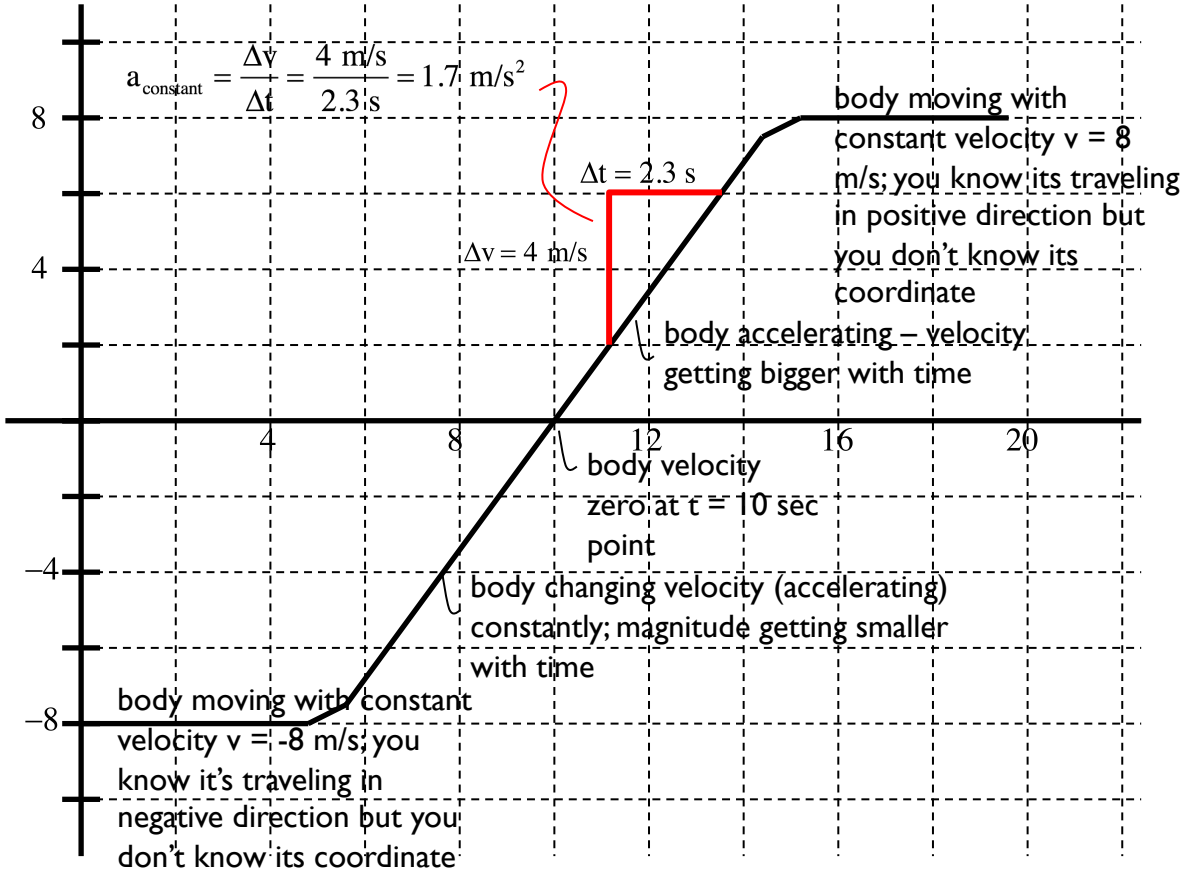


1.) As *position versus time* graph:

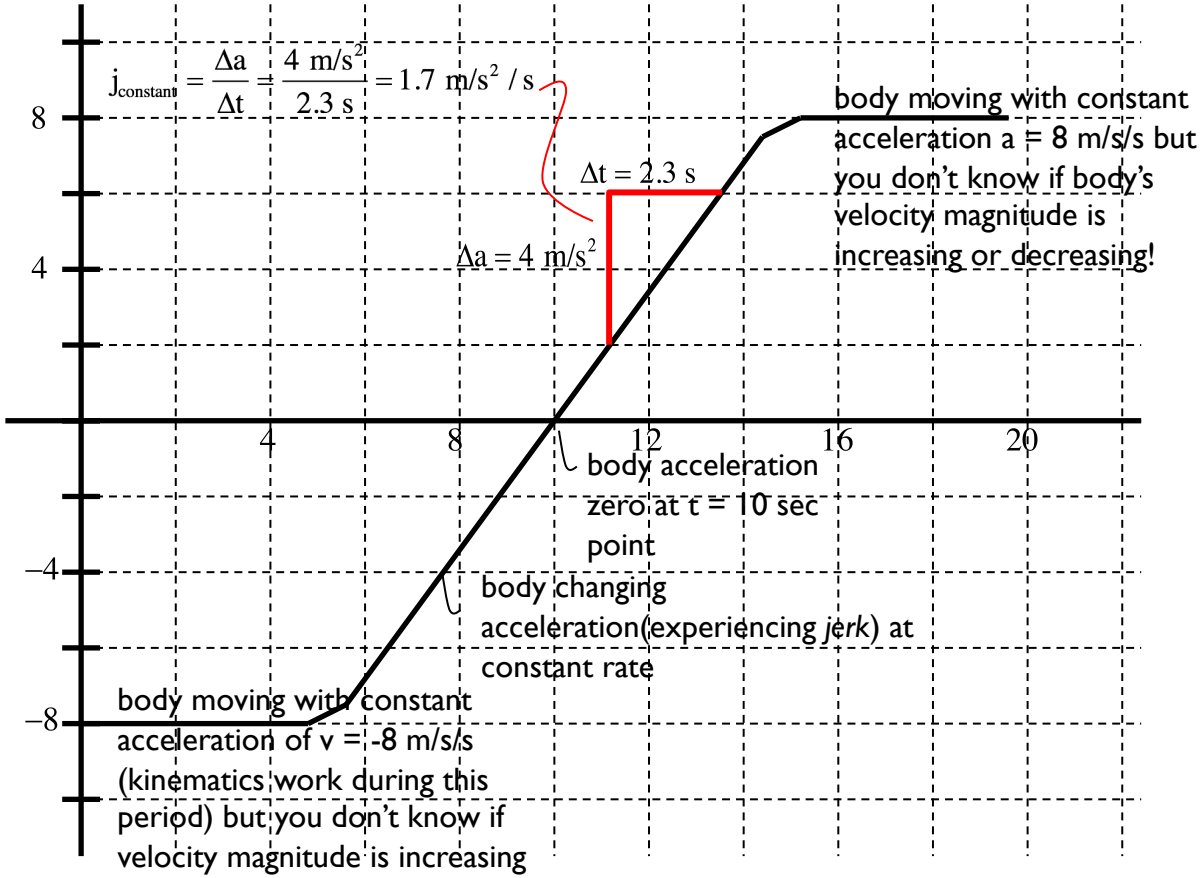


2.)

1.) As *velocity versus time* graph:



1.) As *acceleration versus time* graph:



Sign conventions

- The sign of a vector quantity indicates its **direction**.
- This requires that you clearly indicate your coordinate axes!
- What does it mean to have:
  - A positive velocity but negative position?
  - Negative displacement and a positive position?
  - A positive velocity and positive acceleration?
  - Negative velocity but positive acceleration?
  - Negative velocity and negative acceleration?