

Announcements:

• Derby races:

• No more class time

• Initial grade today

• Final due date is Thurs. 12/1 -
You need to bring us your racer
and report on what's different

• Test on Thursday 12/1 over velocity
and acceleration

• Open note

• Practice test today

This week:

- Wiring and programming the Arduino (Today and Thursday)
 - Time trials and data collection for Derby Racers (Friday)
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One of you should get your racer from the cabinet. Make sure both names are on it! Place vehicle on side counter (Organized).

Have a seat - you need

- Calculator
- Pencil
- Paper
- Your notes

- ① 0.48 m/s North
- ② 29.4 s
- ③ 21.32 m North
- ④ 22.86 m/s North
- ⑤ 36.6 m/s North
- ⑥ 126.5 m/s North
- ⑦ 0 m/s^2 Forward

- 3.
- ① $v = 2.78 \text{ m/s}$ $t = 7.67 \text{ s}$
 - ② d
 - ③ $d = v \cdot t$
 - ④ $d = 2.78 \cdot 7.67 = 21.32$
 - ⑤ $d = 21.32 \text{ m North}$

- 5.
- ① $t = 15 \text{ s}$, $v = 57.6 \text{ m/s}$, $a = 1.4 \text{ m/s}^2$
 - ② v_0
 - ③ $v_0 = v_f - at$
 - ④ $v_0 = 57.6 - (1.4)(15) = 36.6$
 - ⑤ $v_0 = 36.6 \text{ m/s North}$