

Midterm results.

AP Score	Number	Scoring Guide:	
5	1	< 24	1
4	2	24 - 35	2
3.5	9	36 - 59	3
3	8	60 - 79	3.5
2	0	80 - 89	4
1	0	90 - 120	5

Midterm PowerSchool score:

$$5 = 98$$

$$4 = 92$$

$$3.5 = 88$$

$$3 = 84$$

$$2 = 74$$

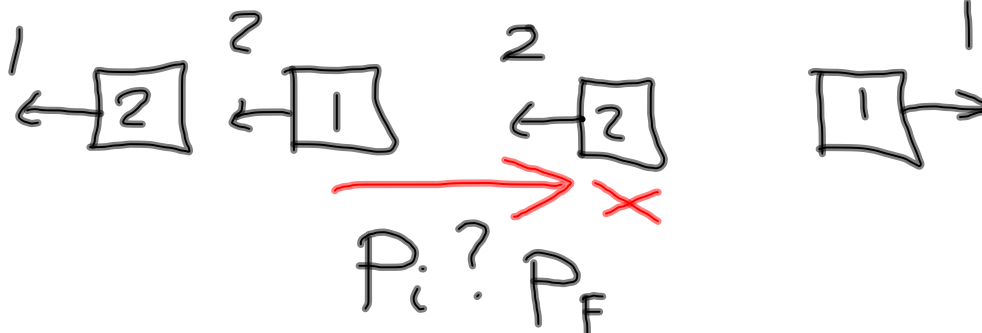
$$1 = 64$$

Jan 29-7:29 AM

HW 5.4.1 d.

Before

After



$$2(-1) + 1(-2) \quad \boxed{} \quad 2(-2) + 1(1)$$

$$-4$$

$\neq$

$$-3$$

NOT POSSIBLE!

Jan 29-8:00 AM

HW: Text Ch.5 Q#10-12
 P#43, 45, 46, 49
 Handout: All but RT05

Jan 29-8:28 AM

MIDTERM:

FR 1

$$\frac{1}{2}kx^2 + W_{F_{xT}} = \frac{1}{2}mv^2$$

a) $\frac{1}{2}kx^2 = \frac{1}{2}mv^2 + \Delta U_{NT}$

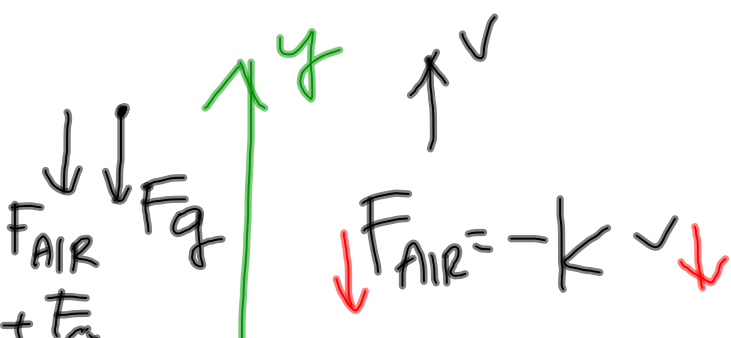
$$\Delta y = \frac{1}{2}gt^2$$

$$\Delta x = V_{0x} \cdot t$$

$$\boxed{V_{0x} = U_0}$$

Jan 29-8:42 AM

FR #2) a)

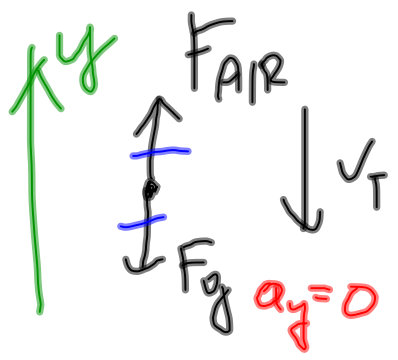


$$F_{net} = F_{AIR} + F_g$$

$$a = \frac{F_{net}}{m}$$

b)

$$\sum F_y = m \cdot a_y$$

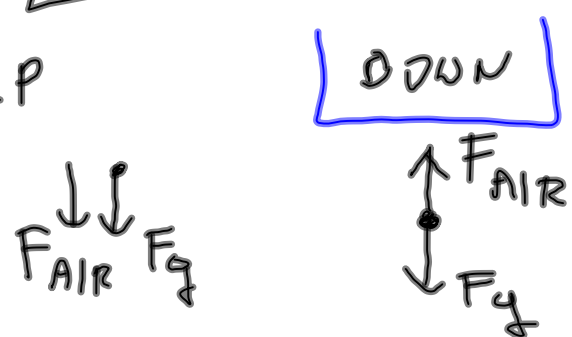
$$F_{AIR} - F_g = m \cdot a_y$$


Jan 29-8:49 AM

$$K v_T - M g = 0$$

$$v_T = \frac{M g}{K}$$

c) up



$$F_{net} > F_{net}$$

$$a = \frac{F_{net}}{m}$$

Jan 29-8:56 AM

d) $\checkmark$ $\circ$
 $\uparrow$ $\vdots$

$\circ$ K

$\downarrow$ $\downarrow$ F_{AIR}
 F_g

$$K \rightarrow U_g$$

$$K \rightarrow \Delta U_{INT}$$

$$TRANSFER = WORK$$

F_g DOES $\ominus W$ to do $K \rightarrow U_g$ (INTERNAL TR.)
 $F_{AIR} \rightarrow \ominus W$ to do $K \rightarrow \Delta U_{INT}$.

Jan 29-9:00 AM

e) $ME_i = ME_F + \Delta U_{INT}$

[FR #7] $\vec{a} = \frac{\vec{F}_{Net}}{m}$

$v+$
 $\leftarrow a-$

$\rightarrow x$

$$K = \frac{1}{2} m v^2$$

$\left. \begin{matrix} v \\ a \end{matrix} \right\} \text{SAME SIGN} \Rightarrow v \uparrow, \text{ so } K \uparrow$

$\left. \begin{matrix} v \\ a \end{matrix} \right\} \text{OPPOSITE SIGN} \Rightarrow v \downarrow, \text{ so } K \downarrow$

Jan 29-9:07 AM