- Need a place to contribute
- How do I add to your GitHub?

Contraints handled as “are you sure” questions

Plan

- If the student answers “yes” to knowing a variable in an equation
- Check if other constraints (that we put in the code) were also said to be known
- Warn them about their “yes” answer

Example

- Dialog
  - Computer: do you know anything about a time interval the truck goes through?
  - Student: yes
  - Computer: Describe the time interval
  - Student: It’s the time it takes it to go from rest to 10 m/s.
  - Computer: Do you know anything about the position of the truck?
  - Student: yes

Example

- Dialog
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Asking about Δt

Asking about x in $x = x_0 + v_0\Delta t + \frac{1}{2}a\Delta t^2$

Example

- Computer asks if the position of the truck is known
  - Asking about x in $x = x_0 + v_0\Delta t + \frac{1}{2}a\Delta t^2$.
- Code:
  - Checks internally if Δt was previously stated to be known for the truck
  - If so, say

    "x is the position of the truck at the end of the time interval Δt, which you said previously said was 'It's the time it takes it to go from rest to 10 m/s.' Are you sure this is the position you mean?"

Constraints

Equation #	Equation	Variable numbers
1	$x = x_0 + v_{0x}\Delta t + \frac{1}{2}a_x\Delta t^2$	1: x 2: x_0 3: v_{0x} 4: a_x 5: Δt
2	$v_x = v_{0x} + a_x\Delta t$	1: v_x 2: v_{0x} 3: a_x 4: Δt
3	$\Delta t = t_f - t_i$	1: t_f 2: t_i

"Are you sure" questions

If this is said to be known format: (equation,variable)	**Check if this is known already**	**And if so, issue this message**
(1,1)	(1,5)	x is the position of the object at the end of the time interval you said you knew "....."
(1,1)	(3,1)	x is the position of the object at the instant of time tf, which you said you knew "....."
(1,2)	(1,3) or (2,2)	x0 is the position of the object when it has speed v0x which you said you knew "...."
(1,2)	(1,5) or (2,4)	x0 is the position at the beginning of this time interval that you said was "..."
(1,2)	(3,2)	x0 is the position at the exact time you said was "..."