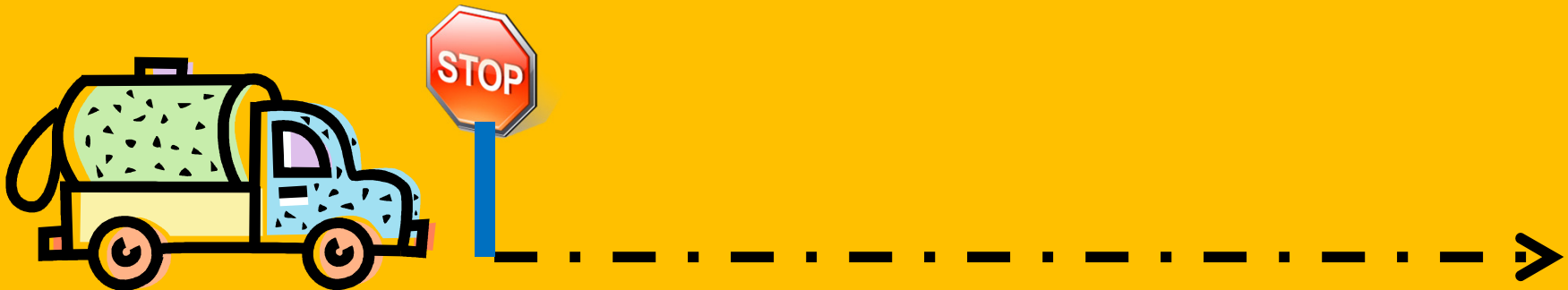
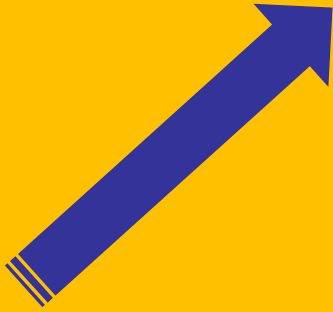


**Notebooks: Open to page 20 for
some note taking!**



Leaving a stop light, a truck undergoes an acceleration of 3.45 m/s^2 for 12.0 s . It then travels at a constant speed. What was its final speed and how many kilometers has it traveled after 45.0 s ?

Solving Physics Motion Problems- 2 Ways

1. Read the entire problem.

Leaving a stop light, a truck undergoes an acceleration of 3.45 m/s^2 for 12.0 s . It then travels at a constant speed. What was its final speed and how many kilometers has it traveled after 45.0 s ?

Solving Physics Motion Problems- 2 Ways

1. Read the entire problem.
2. Identify key terms that relate to motion
 - “At rest”, “slowed down”, “how long” etc.
 - Convert to “motion language”-> “at rest means initial velocity is zero”

Leaving a stop light, a truck undergoes an acceleration of 3.45 m/s^2 for 12.0 s . It then travels at a constant speed. What was its final speed and how many kilometers has it traveled after 45.0 s ?

Solving Physics Motion Problems- 2 Ways

1. Read the entire problem.
2. Identify key terms that relate to motion
 - “At rest”, “slowed down”, “how long” etc.
 - Convert to “motion language”-> “at rest means initial velocity is zero”
3. Draw a diagram



Solving Physics Motion Problems- 2 Ways

1. Read the entire problem.
2. Identify key terms that relate to motion
 - “At rest”, “slowed down”, “how long” etc.
 - Convert to “motion language”-> “at rest means initial velocity is zero”
3. Draw a diagram
4. List know initial conditions (when $t=0$ seconds)



Solving Physics Motion Problems- 2 Ways

1. Read the entire problem.
2. Identify key terms that relate to motion
 - “At rest”, “slowed down”, “how long” etc.
 - Convert to “motion language”-> “at rest means initial velocity is zero”
3. Draw a diagram
4. List known initial conditions (when $t=0$ seconds)
5. List known final conditions



Solving Physics Motion Problems- 2 Ways

1. Read the entire problem.
2. Identify key terms that relate to motion
 - “At rest”, “slowed down”, “how long” etc.
 - Convert to “motion language”-> “at rest means initial velocity is zero”
3. Draw a diagram
4. List known initial conditions (when $t=0$ seconds)
5. List known final conditions
6. Identify all unknowns

Solving Physics Motion Problems- 2 Ways

1. Read the entire problem.
2. Identify key terms that relate to motion
 - “At rest”, “slowed down”, “how long” etc.
 - Convert to “motion language”-> “at rest means initial velocity is zero”
3. Draw a diagram
4. List known initial conditions (when $t=0$ seconds)
5. List known final conditions
6. Identify all unknowns
7. Write out your 2 kinematic equations for position (x) and velocity (y) and draw your P,V, A diagrams

Solving Physics Motion Problems- 2 Ways

Write out your 2 kinematic equations for position (x) and velocity (v) and draw your P,V, A diagrams:

$$X = X_0 + V_0t + 1/2at^2$$

$$V = V_0 + at$$

