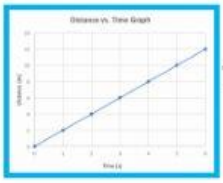
Name: _____ Date: _____ **Lesson 1.4 Distance vs Time Graphs Notesheet**

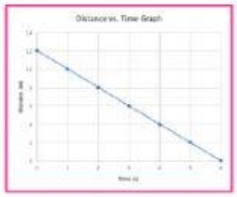
Graphing Motion: *Graphs can visually help us to understand an object's motion.*

- *Slope: the* ***steepness*** *of a* ***line*** .
  - *calculated as* ***rise / run*** = ▲ *(delta) y / ▲ (delta) x*
- *On a* ***distance*** *vs. time graph, this means…*
  - *calculated as* $\frac{\text{rise}}{\text{run}} = \frac{\Delta y}{\Delta x} = \frac{\text{distance}}{\text{time}}$
- Therefore on a distance vs. ***time*** graph, the slope = ***speed***.

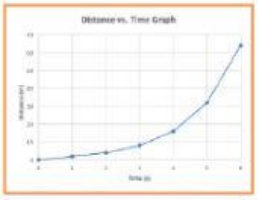
Graphing Trends for Distance vs. Time Graphs



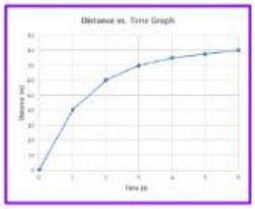
The object is moving at a ***constant*** speed, ***away*** from the reference point.



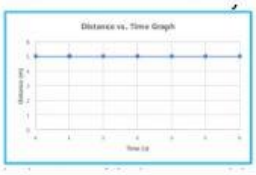
The object is moving at a ***constant*** speed, coming ***towards*** the reference point.



The object is ***speeding up (accelerating)***, due to the line becoming ***steeper.***

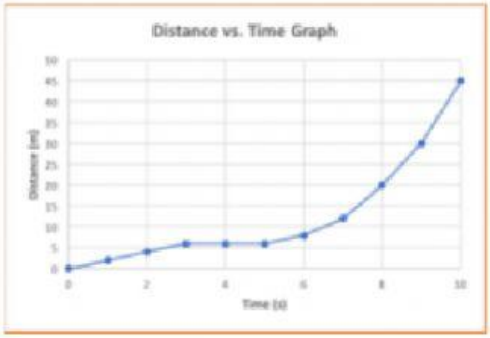


The object is ***slowing down (decelerating)***, due to the line ***leveling out***.

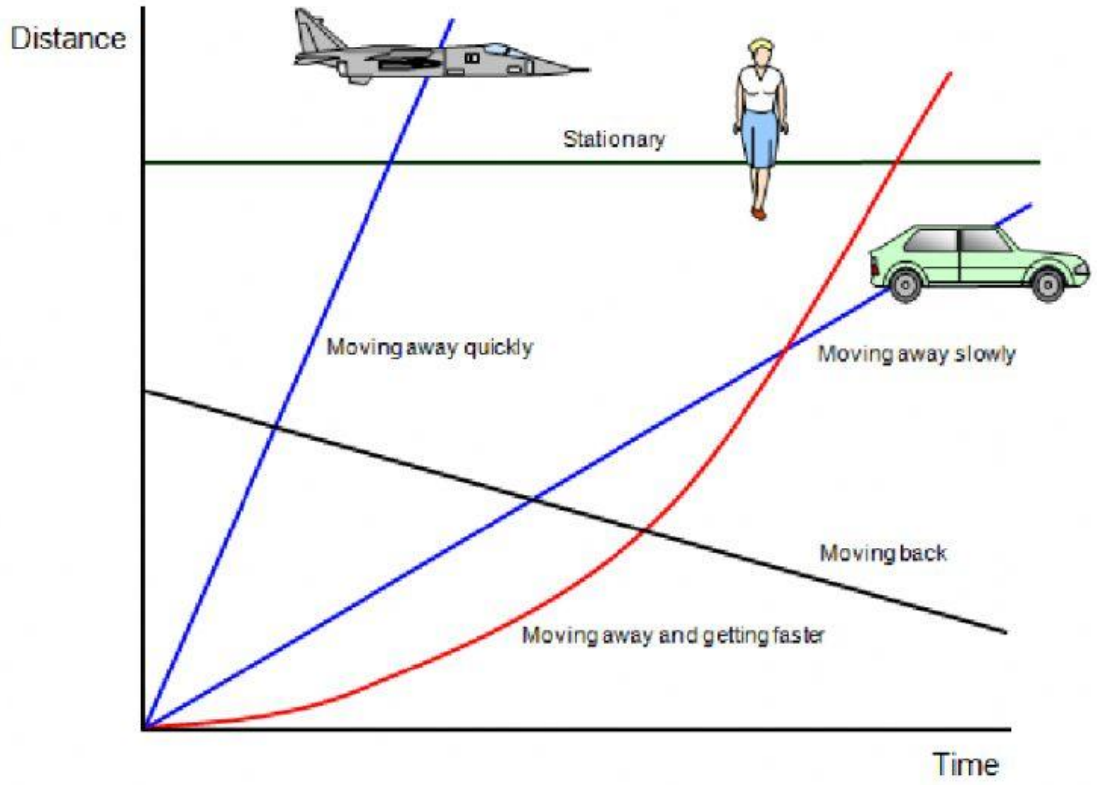


Object is ***not moving (stationary)***.

In this graph, place the numbers to indicate where the trend is occurring.
1. An object moving at a constant speed.
2. An object that is stopped.
3. An object that is speeding up.



LIVEWORKSHEETS



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