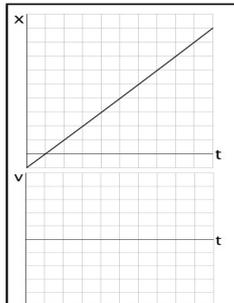
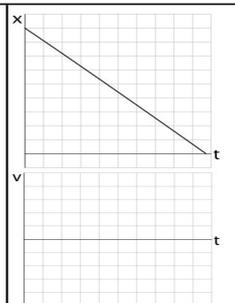
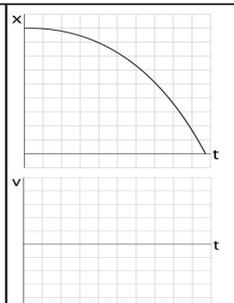
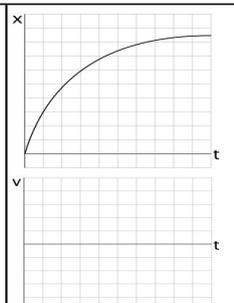
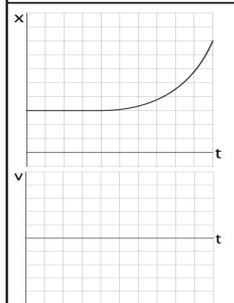
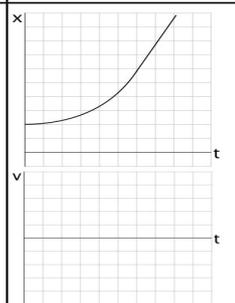
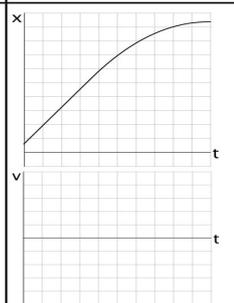
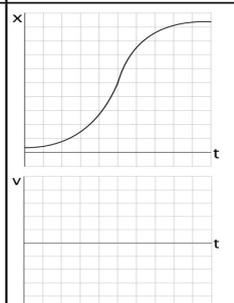


### Stacks of Kinematics Curves

Given the following position vs time graphs, sketch the corresponding velocity vs time and acceleration vs time graphs. For each problem (or part of problem), tell whether the **forces** on the object must be balanced or unbalanced. If the forces are unbalanced, say whether they are unbalanced in the positive or negative direction.

|   |   |   |  |
|---|---|---|--|
|  <p>Balanced or Unbalanced? (+ / -)</p>  |  <p>Balanced or Unbalanced? (+ / -)</p>  |  <p>Balanced or Unbalanced? (+ / -)</p>  |  <p>Balanced or Unbalanced? (+ / -)</p>  |
|  <p>Balanced or Unbalanced? (+ / -)</p> |  <p>Balanced or Unbalanced? (+ / -)</p> |  <p>Balanced or Unbalanced? (+ / -)</p> |  <p>Balanced or Unbalanced? (+ / -)</p> |