**Air resistance model**

\[
\frac{dv}{dt} = -g - (k/m)v \\
v(0) = 0
\]

\[g = 9.8 \quad \frac{k}{m} = 2\]

<table>
<thead>
<tr>
<th>t</th>
<th>v</th>
<th>v'</th>
<th>(\Delta v = v' \Delta t)</th>
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<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>-9.8</td>
<td>-1.96</td>
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<td>0.2</td>
<td>-1.96</td>
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<tr>
<td>0.4</td>
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<tr>
<td>0.6</td>
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<td>0.8</td>
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<tr>
<td>1.2</td>
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</table>
Air resistance model

\[ \frac{dv}{dt} = -g - (k/m)v \]
\[ v(0) = 0 \]

\[ g = 9.8 \]
\[ k/m = 2 \]

<table>
<thead>
<tr>
<th>t</th>
<th>v</th>
<th>v'</th>
<th>Δv = v' * Δt</th>
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Air resistance model

\[
\frac{dv}{dt} = -g - (k/m)v
\]
\[v(0) = 0\]

\[
g = 9.8
\]
\[
k/m = 2
\]

<table>
<thead>
<tr>
<th>t</th>
<th>v</th>
<th>v'</th>
<th>(\Delta v = v' \Delta t)</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
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<td>-1.96</td>
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