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| **PH 201 Pre-Lab 10** | **Impulse and Momentum** | **Name** |  |

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| In this week’s lab we are going to examine impulse and momentum.  |
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| You have a relationship $K=\frac{1}{2}mv^{2}$ You plot K on the y axis and m on the x axis. |
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| 1. What would the slope be? |
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| $$Slope=$$ |  |

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| 2. What should the y-intercept be? |
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| $$y-intercept=$$ |  |

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| Keep the relationship $K=\frac{1}{2}mv^{2}$ but now you plot ln(m) on the y axis and ln(v) on the x axis. |
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| 3. First solve for m = ??? |
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| 4. Now write out Ln(m) = ??? |
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| 5. What is the slope of the Ln(m) vs Ln(v) plot? |
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| --- | --- |
| $$Slope=$$ |  |

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| 6. What is the y-intercept? |
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| --- | --- |
| $$y-intercept=$$ |  |

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| 7. So how would one get Kinetic energy from this Ln(m) vs Ln(v) plot? |
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| $$K=$$ |  |

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