

**Physics videos to help you with the math review packet**

Topic	Time	Video links	What you will learn
Scientific notation	5 min	<a href="https://www.youtube.com/watch?v=WwmJ5nMmigQ">https://www.youtube.com/watch?v=WwmJ5nMmigQ</a>	<ul style="list-style-type: none"> <li>• how to get numbers in sci. not.</li> <li>• how to use sci. notation on your calculator</li> </ul>
	8 min	<a href="https://www.youtube.com/watch?v=1jDfRhMl0z4">https://www.youtube.com/watch?v=1jDfRhMl0z4</a>	
Trig review	10 min	<a href="https://www.youtube.com/watch?v=lQt2p2bhXuc">https://www.youtube.com/watch?v=lQt2p2bhXuc</a>	<ul style="list-style-type: none"> <li>• solving for sides of a right triangle given 1 side and an angle</li> <li>• Solving for the angle given 2 sides</li> </ul>
Algebra Review (also has a little more trig review)	20 min	<a href="https://www.youtube.com/watch?v=zO5MbHL58jI">https://www.youtube.com/watch?v=zO5MbHL58jI</a>	<ul style="list-style-type: none"> <li>• solving simultan. equations</li> <li>• more trig review</li> </ul>
Converting units within the metric system	15 min	<a href="https://www.youtube.com/watch?v=W5xyF-mwitU">https://www.youtube.com/watch?v=W5xyF-mwitU</a>	<ul style="list-style-type: none"> <li>• metric to metric unit conversion using dimensional analysis</li> <li>• converting from English to metric units (in → cm)</li> <li>• converting derived units (m/s → miles/hr)</li> </ul>
Converting units using dimensional analysis (factor label method)	30 min	Go to <a href="http://joneslhs.weebly.com/">http://joneslhs.weebly.com/</a> <ol style="list-style-type: none"> <li>1. click on learn</li> <li>2. do 3 one step practices</li> <li>3. do 3 multistep practices</li> <li>4. do 3 double unit practices</li> <li>5. do 3 squared and cubed practices</li> </ol>	

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			<ul style="list-style-type: none"> <li>converting squared and cubed units (<math>\text{cm}^3 \rightarrow \text{in}^3</math>)</li> </ul>
Vector Addition Basics	11 min	<a href="https://www.youtube.com/watch?v=pimr9I92GZY">https://www.youtube.com/watch?v=pimr9I92GZY</a>	<ul style="list-style-type: none"> <li>steps to graphical and algebraic addition of vectors</li> <li>multiplying vectors</li> <li>negative vectors</li> </ul>
Finding vector magnitude and direction	4 min	<a href="https://www.youtube.com/watch?v=WxWJorOVIj8">https://www.youtube.com/watch?v=WxWJorOVIj8</a>	<ul style="list-style-type: none"> <li>how to use trig to find the resultant vector magnitude and direction</li> </ul>
Finding components of a resultant vector	3 min	<a href="https://www.youtube.com/watch?v=-fbCI2qcgRk">https://www.youtube.com/watch?v=-fbCI2qcgRk</a>	<ul style="list-style-type: none"> <li>how to taking the resultant and angle and split it up into the x and y components</li> </ul>
Finding resultant of 3 or more vectors	15 min	<a href="https://www.youtube.com/watch?v=g_TnqKX5ybY">https://www.youtube.com/watch?v=g_TnqKX5ybY</a>	<ul style="list-style-type: none"> <li>how to solve problems with more than two vectors</li> </ul>