Online Videos

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| Ch. 7 Right Triangles and Trigonometry | |
| 7.1 Apply the Pythagorean Theorem | [What is the Pythagorean Theorem?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/pythagorean-theorem-converse/pythagorean-theorem-definition)  [How Do You Find the Length of a Leg of a Right Triangle?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/pythagorean-theorem-converse/leg-length-right-triangle-solution) |
| 7.2 Use the Converse of the Pythagorean Theorem | [What is the Converse of the Pythagorean Theorem?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/pythagorean-theorem-converse/What-is-the-Converse-of-the-Pythagorean-Theorem?)  [How Do You Determine if a Triangle Is a Right Triangle if You Know its Sides?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/pythagorean-theorem-converse/right-triangle-determination-from-sides) |
| 7.3 Use Similar Right Triangles | [What is a Geometric Mean?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/similarity/geometric-mean-definition) |
| 7.4 Special Right Triangles  \*Must be able to Rationalize a Denominator\*  <https://www.youtube.com/watch?v=w3PGLLT5nr4> | [What is a 45°-45°-90° Triangle?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/special/45-45-90-triangle-definition)  [How Do You Find Missing Sides in a 30°-60°-90° Triangle?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/special/30-60-90-triangle-example)  [How Do You Find a Missing Hypotenuse in a 45°-45°-90° Triangle?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/special/45-45-90-triangle-example)  [What is a 30°-60°-90° Triangle?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/special/30-60-90-definition) |
| 7.5 Apply the Tangent Ratio | [What is the Tangent Ratio?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/ratios/What-is-the-Tangent-Ratio?)  [How Do You Find the Tangent of an Angle in a Right Triangle?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/ratios/tangent-example)  [How Do You Find a Missing Side of a Right Triangle Using Tangent?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/ratios/tangent-find-missing-side)  <https://www.youtube.com/watch?v=WLmDdc-bX1o> – How to use your Graphing Calculator for SOH CAH TOA to find missing sides    **MAKE SURE YOUR CALCLULATOR IS ALWAYS IN DEGREE MODE** |
| 7.6 Apply the Sine and Cosine Ratios | [What is the Sine Ratio?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/ratios/sine-ratio-definition)  [How Do You Find the Sine of an Angle in a Right Triangle?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/ratios/sine-example)  [How Do You Find a Missing Side of a Right Triangle Using Sine?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/ratios/sine-find-missing-side)  [How Do You Find the Cosine of an Angle in a Right Triangle?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/ratios/cosine-example)  [How Do You Find a Missing Side of a Right Triangle Using Cosine?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/ratios/cosine-find-missing-side) |
| 7.7 Solve Right Triangles | [How Do You Find the Length of a Leg of a Right Triangle?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/pythagorean-theorem-converse/leg-length-right-triangle-solution)  [How Do You Find a Missing Side of a Right Triangle Using Tangent?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/ratios/tangent-find-missing-side)  [How Do You Find a Missing Side of a Right Triangle Using Sine?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/ratios/sine-find-missing-side)  [How Do You Find a Missing Side of a Right Triangle Using Cosine?](http://www.virtualnerd.com/geometry/right-triangles-trigonometry/ratios/cosine-find-missing-side)  <https://www.youtube.com/watch?v=WLmDdc-bX1o> – How to use your Graphing Calculator for SOH CAH TOA to find missing sides  <https://www.youtube.com/watch?v=r6UZZ-KQNHk> – How to find missing angles in a right triangle using SOH CAH TOA and the CALCULATOR  <https://www.youtube.com/watch?v=WLmDdc-bX1o> – Solve a Right Triangle <https://www.youtube.com/watch?v=OWY5X2j2Za8>– Solve a Right Triangle |