

**Trig Homework 4**  
**due Friday, July 11th**

- page 533, 7.1 # 40, 42, 46
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1. One of the sides in a triangle is twice as long as another. The angle between these two sides is  $60^\circ$ . Show that this is a right triangle.
  2. One side of a triangle has length 6, another has length  $2\sqrt{7}$ , and the angle that is opposite to that side measures  $60^\circ$ . Find the third side in this triangle.
  3. A point  $D$  lies on the side  $AB$  of the triangle  $ABC$ . Find  $CD$ , given that  $BC=37$ ,  $AC = 15$ ,  $AB = 44$ , and  $AD = 14$ .