Trig Homework 3
due Thursday, July 3rd

• 5.3 page 429 # 26, 30, 34 (do not use a calculator to draw the graph)
• 5.4 page 441 # 10, 26, 48 (do not use a calculator to draw the graph)
• 7.2 page 539 # 2, 4, 28, 32

1. A line that goes through the vertex A of a triangle $ABC$ crosses the side $BC$ at the point $M$. Given that $BM = BA$, $\angle BAM = 35^\circ$, and $\angle CAM = 15^\circ$, find the angles of $ABC$.

2. In a right triangle $ABC$ the lengths of the legs are 15 and 20. On the hypothenuse $AB$ pick a point $D$ so that $AD = 4$. Find $CD$.

3. Let $ABC$ be a right isosceles triangle with the hypothenuse $AB$. We draw a circle so that $AC$ is the diameter of the circle. Let $M$ be the point where the circle intersects $AB$. Find the distance from the vertex $B$ to the center $O$ of the circle if $BM = \sqrt{2}$. 