Name:

Math 490, Spring 2013: Homework #2
Due Tuesday, February 5, 2012

1. Let x be an angle in $[0, 360^\circ]$.

a. Show $\cos(180^\circ - x) = -\cos x$.

b. Show $\sin(180^\circ - x) = \sin x$.

2. State and prove the Side-Angle-Side (SAS) congruence property for triangles. Please cite your source(s)!

3. Is Side-Side-Angle (SSA) a congruence property for triangles? If so, carefully state the property in words and prove it. If not, give a counterexample.

4. State and prove the Law of Sines. Please cite your source(s)!

5. Be prepared on Tuesday (Feb. 5) to lead a discussion/problem solving session on one of Dan Meyer's "three acts" problems (linked here: https://docs.google.com/spreadsheet/ccc?key=0AjIqyKM9d7ZYdEhtR3BJMmdBWnM2YWxWYVM1UWowTEE#gid=0).

From TEXT:
5.2, 1, 2, 3, 5, 6