Math 215 – Fall 2017

Practice Homework 7 – Assigned October 2nd, due October 5th

Note: Remember that you must show your work to get full credit for a problem.

1. Let a, b, and c be integers such that $a^2 + b^2 = c^2$. Prove that at least one of a, b, and c is even.

2. Let a, b, and c be integers such that $a^2 + b^2 = c^2$. Prove that it can not be that exactly two of a, b, and c are even.

3. Let a, b, and c be integers such that $a^2 + b^2 = c^2$. Show that at least one of a, b and c has to be divisible by 3.