**Math 201: Class Discussion (31 Aug 2017)**

Naïve set theory

Study carefully sections 1.1 – 1.7 of Hammack

1. List the elements of each of the following sets: (a) {x∈ R : x4 – 1 = 0} (b) {x∈ Z : -1/3 < x < 5.99}

(c) {x ∈ N | x ≤ 4} (d) {unicorns| unicorn lives in Illinois} (e) {} (f) {φ}

(g) {1, {2}}

1. Write in set notation: (a) {4, 9, 16, 25, …} (b) {1/1, 1/3, 1/5, 1/7, …} (c) {…l/8, ¼, ½, 1, 2, 4, 8, …}
2. Determine the cardinality of each set in (1).
3. Find each of the following cardinalities:



1. Sketch the following sets of points in the xy-plane.





1. Find the power set of each of the following sets:



 





[Course Home Page](http://www.math.luc.edu/~ajs/courses/100fall2017/index.pdf)           [Department Home Page](http://www.math.luc.edu/)         [Loyola Home Page](http://www.luc.edu/)