Definition 1. Let A, B be classes. A is *equinumerous to* B iff there exists a bijection between A and B.

Proposition 2. Let A be a class. Then A is equinumerous to A.

Proof. id_A is a bijection between A and A. ■

Proposition 3. Let A, B be classes. If A and B are equinumerous then B and A are equinumerous.

Proof. Assume that A and B are equinumerous. Take a bijection f between A and B. Then f^{-1} is a bijection between B and A. Hence B and A are equinumerous. ■

Proposition 4. Let A, B, C be classes. If A and B are equinumerous and B and C are equinumerous then A and C are equinumerous.

Proof. Assume that A and B are equinumerous and B and C are equinumerous. Take a bijection f between A and B and a bijection g between B and C. Then $g \circ f$ is a bijection between A and C. Hence A and C are equinumerous. ■