

History of Mathematical Ideas

Quiz 12

Name: _____

You have 15 minutes to complete this quiz. If you have a question raise your hand and remain seated. In order to receive full credit your answer must be **complete**, **legible** and **correct**. Show your work, and give adequate explanations.

1. Define *cardinal number*.

A cardinal number is an ordinal number equipotent with no smaller ordinal number.

2. Give an example of a set of cardinality \aleph_0 . Is there any set of cardinality \aleph_1 ?

\aleph_0 has cardinality \aleph_0 , and \aleph_1 has cardinality \aleph_1 .