

Mathematics 3820H – Mathematics from medieval to modern times

TRENT UNIVERSITY, Fall 2010

Assignment #5

Logs and light

Due on Tuesday, 16 October, 2012.

Do *one* of **1** or **2**.

1. Read [1]. On the basis of the reading and the related material in our textbook, just how accurate is it to say that Napier invented logarithms? How likely is it that someone would have done Napier's part if he had not? [10]
2. Describe the principal attempts before 1500 A.D. to find a scientific explanation of how rainbows are formed. Explain the role that the attempts to explain rainbows had in the development of the scientific method and the role of mathematics in science. [10]

REFERENCE

1. *History of the Invention of Logarithms*, an appendix (pp. 435-507) in *Memoirs of John Napier of Merchiston*, by Mark Napier (London, 1834), which can be found (pdf and epub) online at:
<http://books.google.ca/books?id=husGAAAYAAJ>