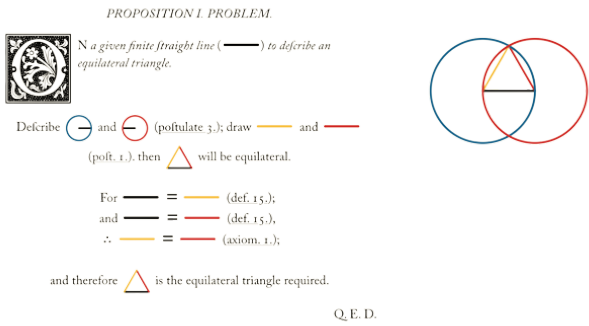














Lesson Plan | Lubna of Cordoba

Agenda	Action
Do Now	Students will discuss how they think the works of Archimedes and Euclid were disseminated from the europeans to the Arab world.
Read Aloud	The class will take turns reading the paragraphs summarizing Lubna’s life on the website out loud.
Watch Video	Instructor will play video on Lubna of Cordoba for class and answer any questions afterward.
Presentation	The instructor will briefly present slides discussing the life and contributions of Lubna of Cordoba to the transcription, annotation, and translation of the Archimedes' and Euclid’s mathematical manuscripts, as well as her contributions to mathematics education.
Interactive	<p>Students will interact with a live version of Euclid’s Elements, and have the chance to engage with a few of the basic proportions of Euclid via Nicholas Rougeux’s live translation of Oliver Byrne’s depiction of Euclid’s 13 books, <i>The Elements</i>.</p> <div style="text-align: center;">  <p style="font-size: small;">PROPOSITION 1. PROBLEM <i>On a given finite straight line (—) to describe an equilateral triangle.</i></p> <p>Describe  and  (postulate 3.); draw  and  (post. 1.); then  will be equilateral.</p> <p>For  =  (def. 15.); and  =  (def. 15.); ∴  =  (axiom. 1.);</p> <p>and therefore  is the equilateral triangle required.</p> <p style="text-align: right; font-size: x-small;">Q. E. D.</p> </div>
Discussion	Students will discuss how the story of Lubna’s ascent from a slave girl under the rule of Caliph Abd al-Rahman III to a library copyist under Caliph Al-Hakan II, as well as her contributions to mathematics (i.e., spreading european texts to the arab world by translating the works of Euclid and Archimedes) and mathematics education (i.e., paved the way for creation of the influential Madinat al-Zahra library in Cordoba) inspires them.

