

Warm up HW1 , Math 330, Fall 2014

Ayman Badawi

QUESTION 1. Submit your work on Thursday Oct 16 at noon (just leave it on the table as you enter the room)

- (i) Draw a line segment, say \overline{AB} . Divide \overline{AB} into three line segments , say S_1, S_2, S_3 such that $|S_2| = 2|S_1|$, and $|S_3| = 0.5|S_1|$. ONLY unmarked ruler an a compass are allowed in the construction. Briefly Justify your work.
- (ii) Draw two line segments say \overline{AB} , and \overline{CD} . Construct a line segment, \overline{MN} , such that $|AB||MN| = |CD|$. Only unmarked ruler, a compass, and 1cm line segment are allowed in the construction. Briefly justify your work.

Faculty information

Ayman Badawi, Department of Mathematics & Statistics, American University of Sharjah, P.O. Box 26666, Sharjah, United Arab Emirates.

E-mail: abadawi@aus.edu, www.ayman-badawi.com