Warm up HWII , Math 330, Fall 2014

Ayman Badawi

QUESTION 1. Submit your work on Sunday Nov 9 at noon (just leave it on the table as you enter the room)

(i) Draw two perpendicular lines intersect at the point O. Draw a circle centered at O. Then construct the angle 45 degree at O, say angle AOB. Trisect the arc that corresponds to the angle O (note that the angle O = AOB = 45 degrees). ONLY unmarked ruler an a compass are allowed in the construction. Briefly and NEATLY Justify your work.

(ii) Draw a line segment say AB. Find the mid point of AB, say M. At M draw a semicircle with radius $|MB|$. Draw a rectangle inside the semicircle, say $EDFW$, where E, W lie on the arc of the semicircle and D, F lie on the line AB such that the length of the rectangle = $\frac{4}{3}$ of the width. ONLY unmarked ruler an a compass are allowed in the construction. Briefly and NEATLY Justify your work.

Faculty information

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