

Third Project MTH 211 Fall 2009

Ayman Badawi

Remark Tiling is everywhere around you!!! Have you ever noticed. Tonight I was walking around campus and I made three observations for the first time after being here since 2003!!!: 1. The side-walk around campus (for example around the sport complex) is tiled using regular 8-gon and one square. 2. I stared at some bumps, for example the one we cross coming from the library toward the boys dorm is tiled using Escher-tiling (MAKE YOUR OWN TILE) on a rectangle!!!. Now leaving campus toward faculty housing, the side-walk is tiled using rectangles.

1 Group: Vishal Sawlani, James Moussa , Odulana Adetayo

- (i) You have a board that is a regular 6-gon such that each side is 4 cm length. We want to tile the board using pieces of regular 6-gon such that each side is 1 cm and pieces of regular 3-gon such that each side is 1 cm. Do the tiling. USE YOUR OWN TASTE of coloring so it would like nice (Whatever nice means!!!)

2 Group: Hiba AlSafi, Dana Nabtiti, Masa Afaneh

- (i) First Draw or make a triangle abc such that the angle at b is 90° , color it with blue, the angle at c is 45° , color it with red, and the angle at a is 45° , color it with green. Make the length of $bc = 1$ cm. Use pieces of this type of triangles to tile a 10×10 board so that all around a should be in green, all around b should be in blue, and all around c should be in red.

3 Group: Dalia AlOurfali, Noor AbdulHamid, Suzan Momani

- (i) (book, number 3, page 88): Start with an equilateral triangle abc such that each side is 2 cm and find the midpoint of each side. Draw a curve (any curve) from the midpoint of ab to the vertex a , then rotate a copy of it around the midpoint of ab . Repeat the same procedure for the the side bc and the side ac (you may use different curves) on bc and ac). USE pieces of this object to tile a 12×12 board as much as you can. Use your own taste of coloring.

4 Group: Suheyla Takesh, Leen Rihawi, Aman

- (i) Start with a square $abcd$ such that each side is 2 cm and find the midpoint of each side. Draw a curve (any curve) from the midpoint of ab to the vertex a , then rotate a copy of it around the midpoint of ab . Repeat the same procedure for the the sides bc cd , and ad (you may use different curves) on bc cd , and ad). USE pieces of this object to tile a 12×12 board. Use your own taste of coloring.

5 Group: Farah Nasri , Seyede Pariya Manafi, Fadi Banani

- (i) we want to use regular 12-gons and equilateral triangles to tile a 40×40 board such that the length of each side of these two objects is 1 cm. USE your own taste of coloring.

6 Group: Nedal Machou, Dana Salam, Momen Abdalghani

- (i) First Draw or make a triangle abc such that the angle at b is 90° , color it with blue, the angle at c is 30° , color it with red, and the angle at a is 60° , color it with green. Make the length of $bc = 1$ cm. Use pieces of this type of triangles to tile a 12×12 board so that all around a should be in green, all around b should be in blue, and all around c should be in red. TILE the board as much as you can!!!

7 Group: Khalda El Jack, Reyan Hanafi

- (i) Start with a 4×2 rectangle $abcd$. Find the midpoint of each side. Draw a curve (any curve) from the midpoint of ab to the vertex a , then rotate a copy of it around the midpoint of ab . Repeat the same procedure for the the sides bc cd , and ad (you may use different curves) on bc cd , and ad). USE pieces of this object to tile a 12×12 board. Use your own taste of coloring.

8 Group: Sepideh, Shital, Safa

- (i) Start with a regular 6-gon. $abcdef$ such that each side is 2 cm and find the midpoint of each side. Draw a curve (any curve) from the midpoint of ab to the vertex a , then rotate a copy of it around the midpoint of ab . Repeat the same procedure for the remaining sides (you may use different curves) on the remaining sides. USE pieces of this object to tile a 24×24 board. Use your own taste of coloring.

9 Group: Samar Ali Abd Al Azez, Farah Faris Mudhefer, Sawsan Al Bahar

- (i) Start with one regular 6-gon, two squares, and one equilateral triangle such that the length of each side of these three objects is 1 cm. Use pieces of these three objects to tile a 24×24 board. USE your own taste of coloring.

10 Group: Vahid Farbod, Abdolreza Khalili, Seyedeh Negar Sanadizadeh

- (i) We want to use regular 5-gons and golden acute triangles to tile a 24×24 board as much as we can. The base of each golden acute triangle is 2cm and the length of each side of each regular 5-gon is also 2cm. USE your own taste of coloring.

Faculty information

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