



Culture, Language and Maths

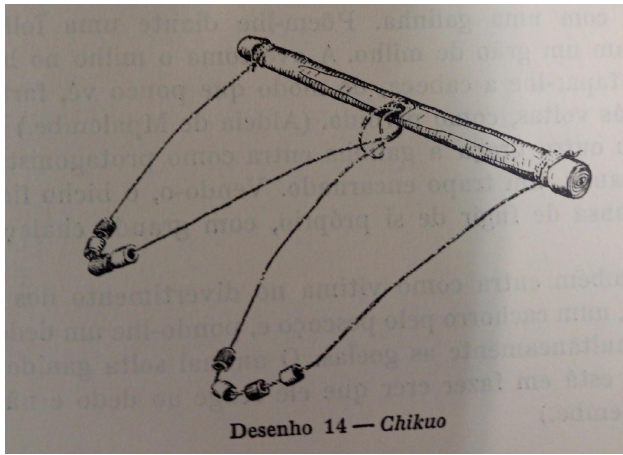
Tiago Hirth - thirth@campus.ul.pt



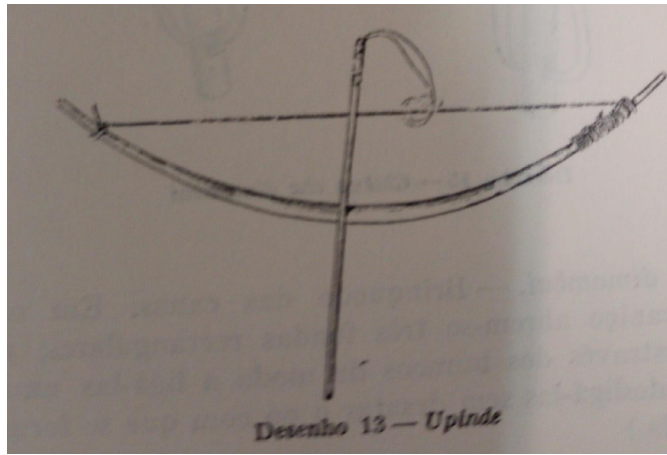
CIUHCT
Centro Interdisciplinar de História,
Cultura e Tecnologia
www.ciuhct.ulisboa.pt



Ludus



Desenho 14 — Chikuo



Desenho 13 — Uplnde

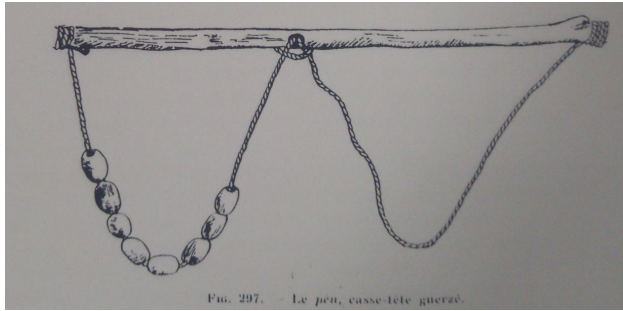
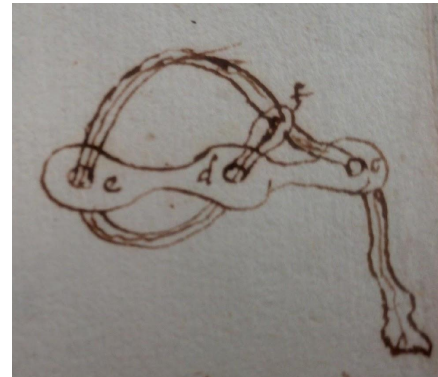
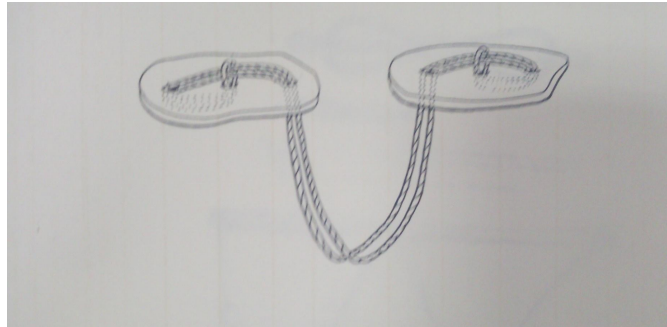


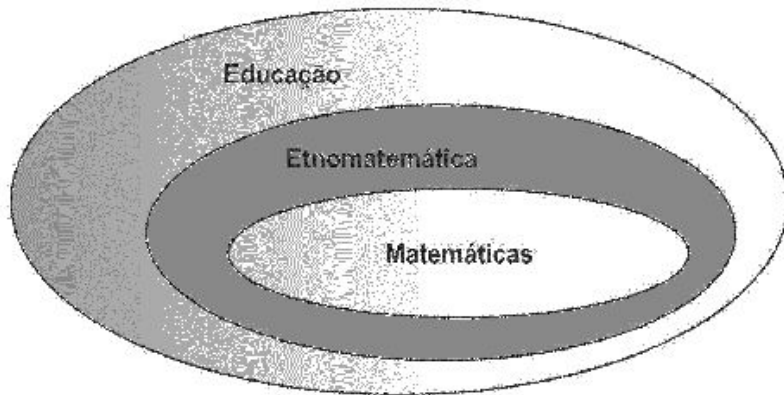
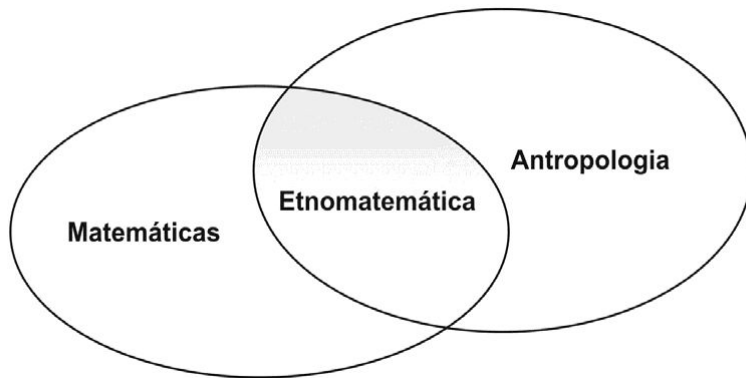
Fig. 297. — Le pen, casse-tête guerres.





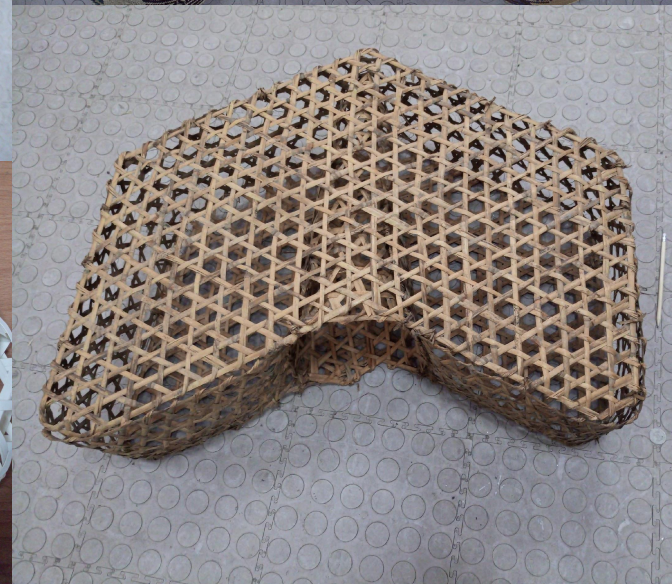
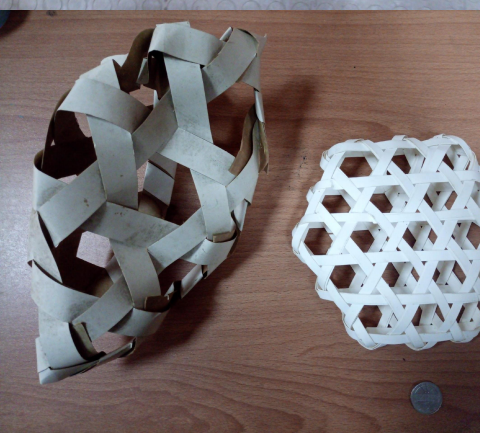
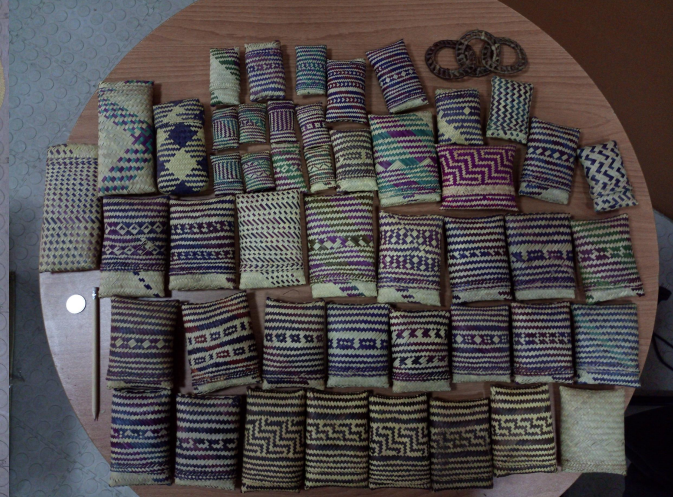
Paulus Gerdes

Ethnomathematics



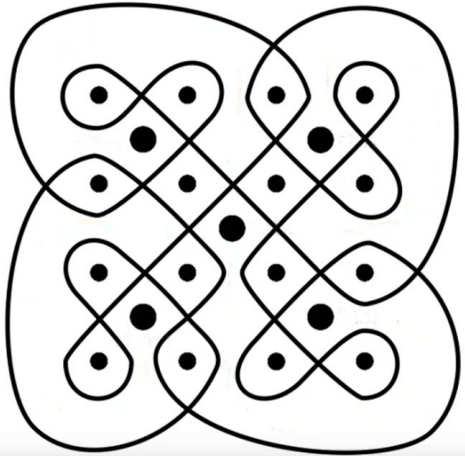
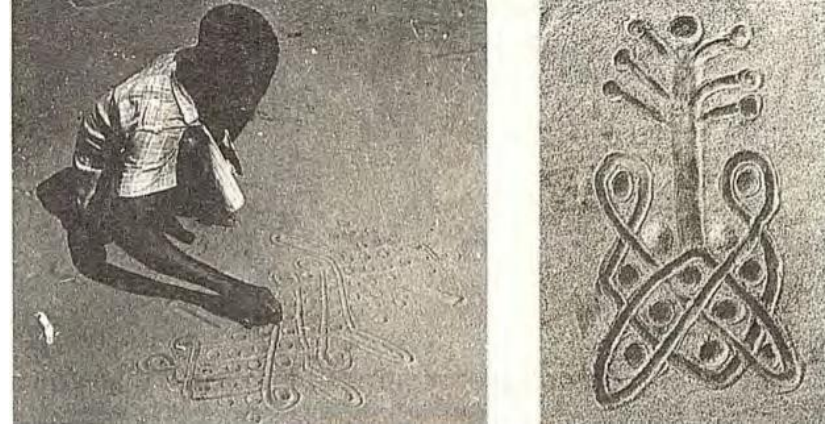
Ubiratan D'Ambrosio





(Lu)Sona

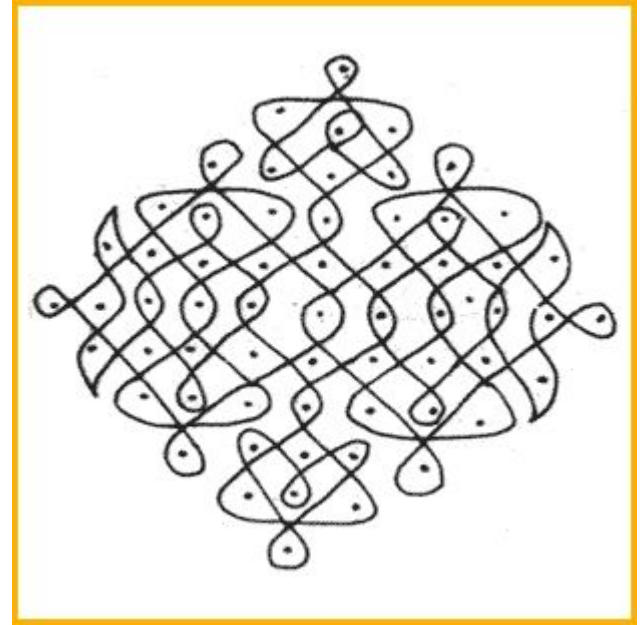
Tchokwe (Quiocos), Lunda, Luena, Xinge e Minungo of Southern Africa (Northeast Angola, Northwest Zâmbia and Congo).



Vanuatu - Sand Drawing

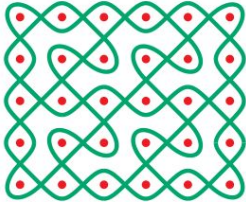


Indian - Rangoli

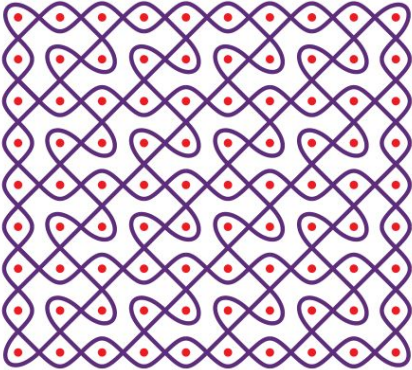


Sequence

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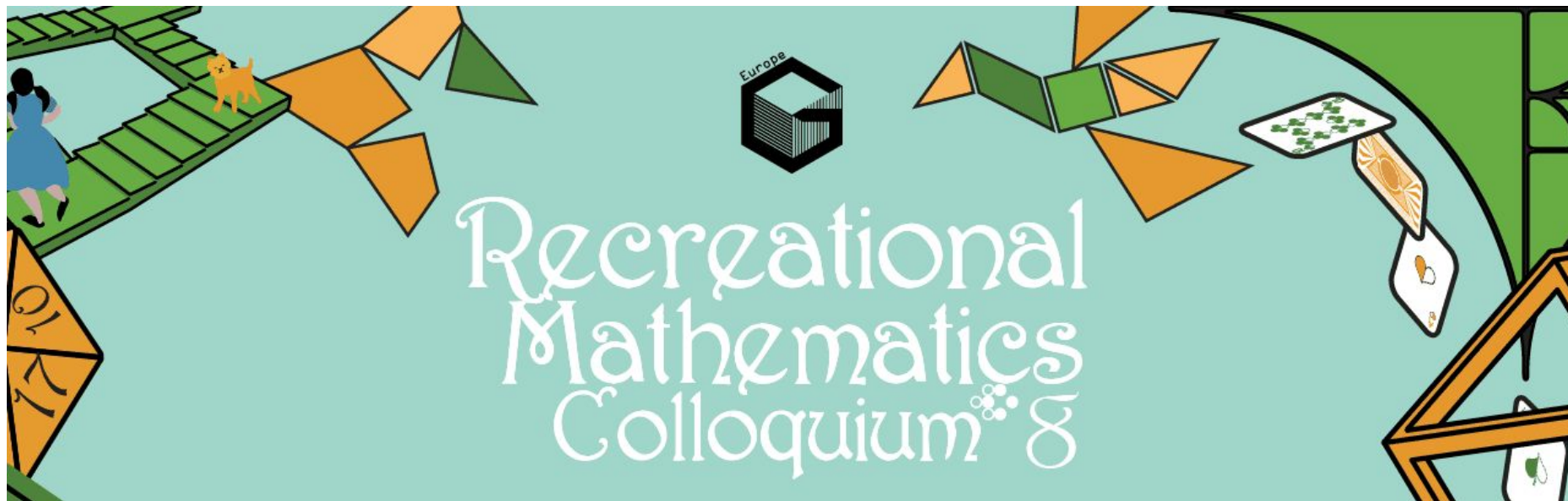
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HAPPY DIWALI 2024

Using a 3×3 dot grid, how many distinct Rangoli designs can be created that allow for drawing without lifting your hand from the ground?

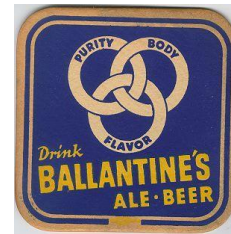
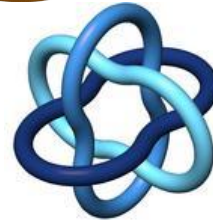
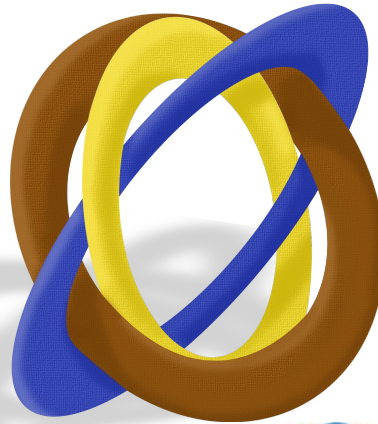
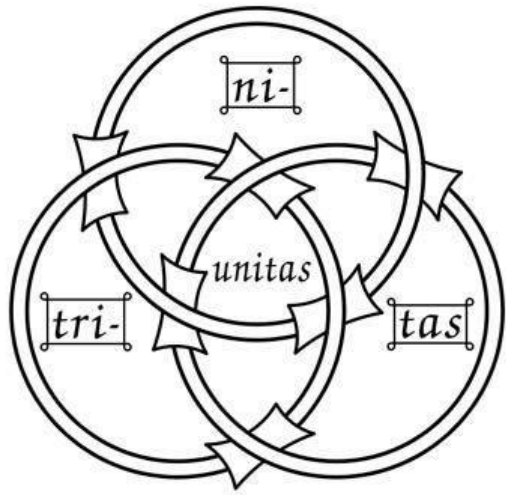
Here are a few sample designs





Pavilhão do Conhecimento, Lisbon, Portugal
January 26 (public session) and 27 to 29, 2025

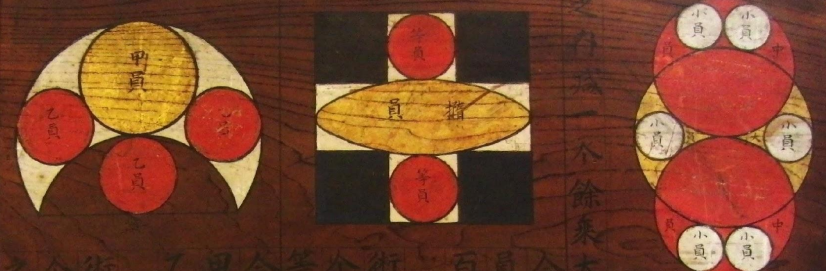
Bonus Slides



Wasan

安政六年己未月...

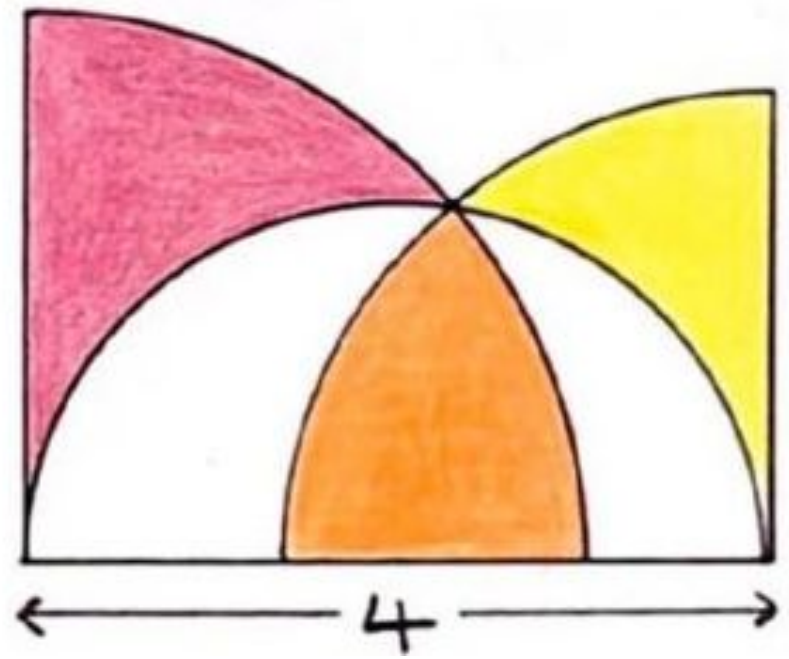
關流宗欽六傳
御粥安本門人
西條藩 山本庸三郎貴隆撰



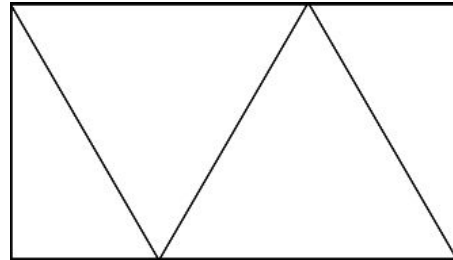
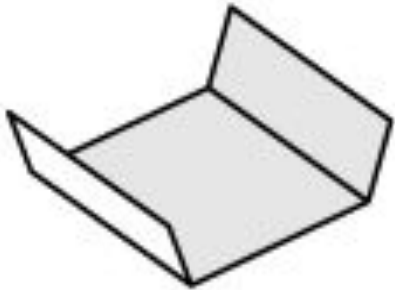
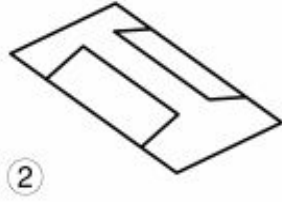
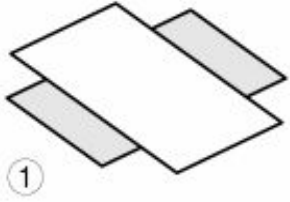
之... 一个餘乘大徑四除之得中徑合問
今有如圖方内容積員分等
員一等方... 員徑七十三
百九十二寸問等方而幾何
答曰等方... 員徑七十三
術曰置五本平方開之加二
个平方開之乘等徑半之得
等方面合問
今有如圖員缺内隔弦幾容
甲員一乙員个甲員徑五寸
乙員徑四寸問弦幾何
答曰弦一十六寸
術曰以乙徑除甲徑得成一
个餘平方開之以除乙徑倍
之得弦合問

今有如圖交置大員一中
員一而其容小員中大
員徑五百九十七寸問中
員徑幾何
答曰中員徑一百一十寸
術曰置一十七个平方開
之得中徑四除之得中徑合問

Sangaku Style Problems by Catriona Agg



Origami - Puzzle



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