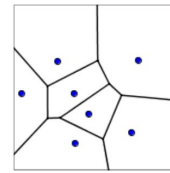
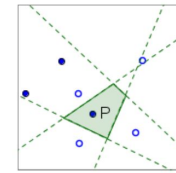
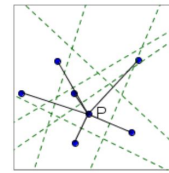
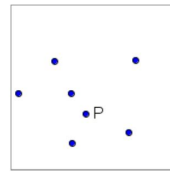


Was haben die Aufstellung bei
einem Fußballspiel, die
Standortsuche für ein neues
Geschäft und die Struktur
eines Insektenflügels
gemeinsam?

Edith Lindenbauer und Sandra Reichenberger

Was erwartet uns?



- Aufstellung bei einem Fußballspiel
- Standortsuche für ein neues Geschäft
- Struktur eines Insektenflügels
- Mathematik???

???

Budweis: Von wo bekomme ich meine Post

Geodreieck

Bleistift



- Welche Art von Linien sind die Kanten? Gerade? Kurvig?
- Wie viele Kanten gibt es?
- Warum zeichnet man Streckensymmetralen (Mittelsenkrechte)?

Linz: Von wo bekomme ich meine Post

Geodreieck

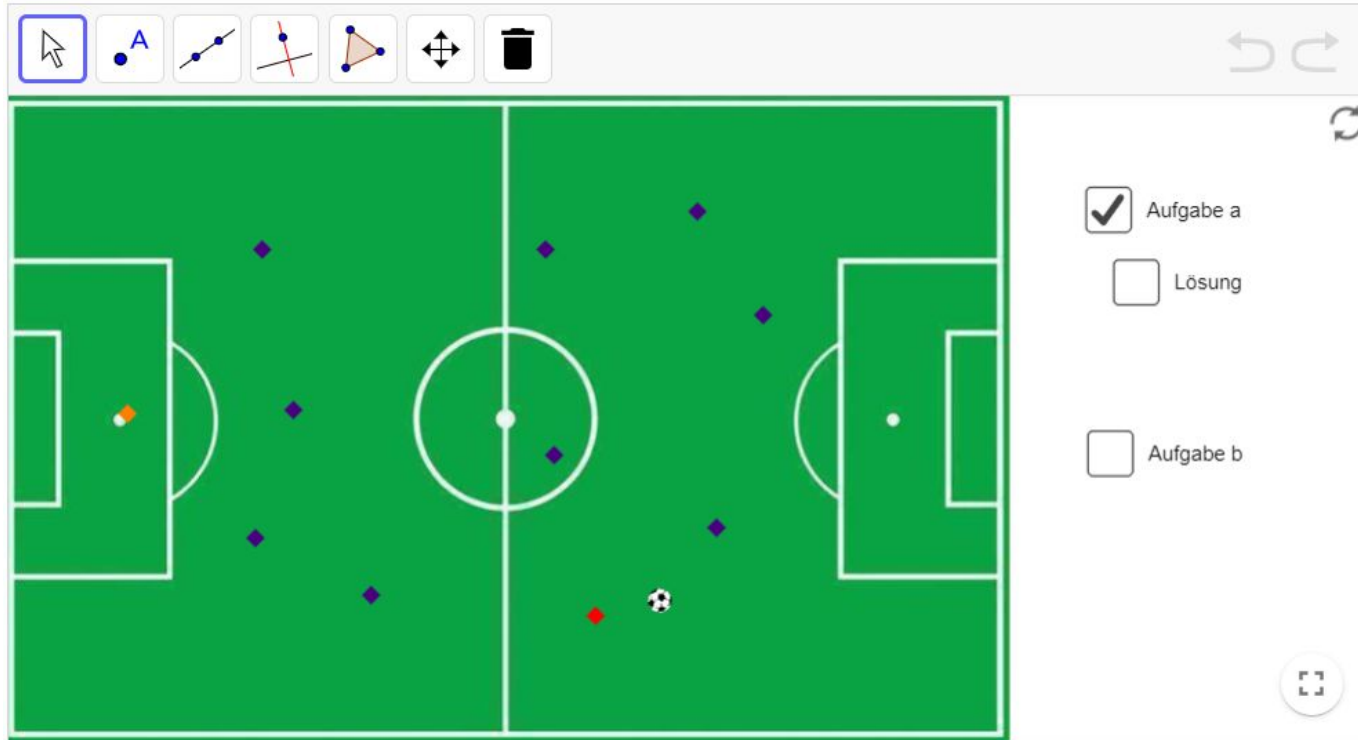
Bleistift



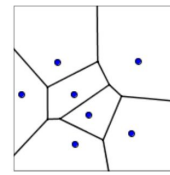
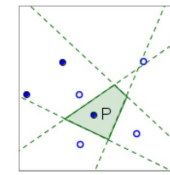
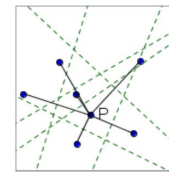
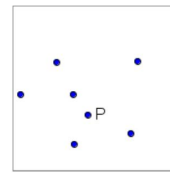
GeoGebra

- Wie viele Kanten können an einem Eckpunkt zusammentreffen?
- Sind in diesem Diagramm alle Zustellbereiche abgeschlossen? Warum nicht?
- Wenn dein Haus auf der Kante zwischen P1 und P3 liegt - was bedeutet das?
- Was wäre wenn ein Haus auf einem Eckpunkt von mehreren Regionen liegt?

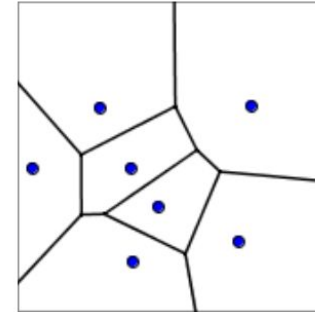
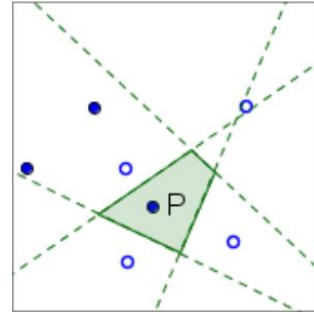
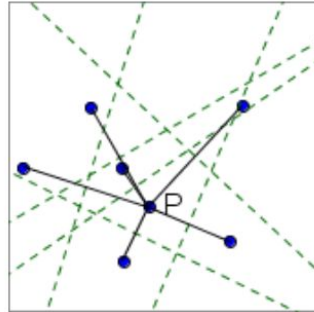
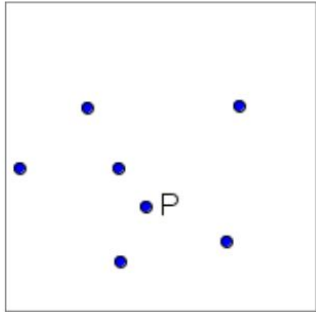
Aufstellung bei einem Fußballspiel



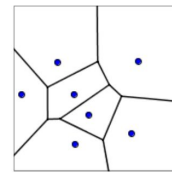
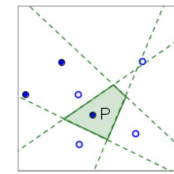
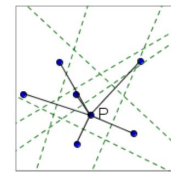
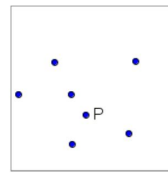
Theorie



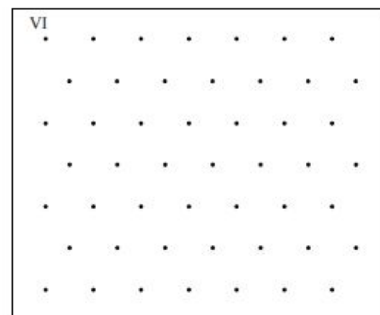
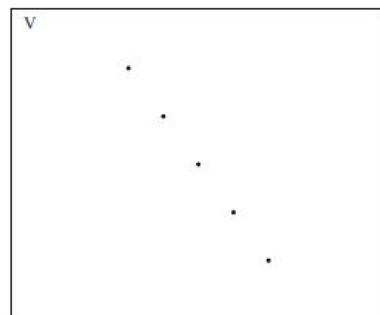
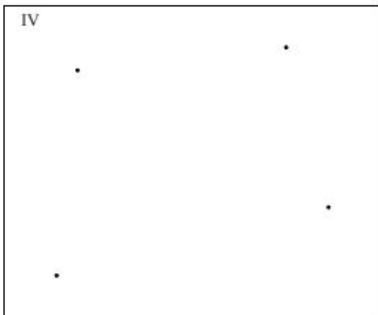
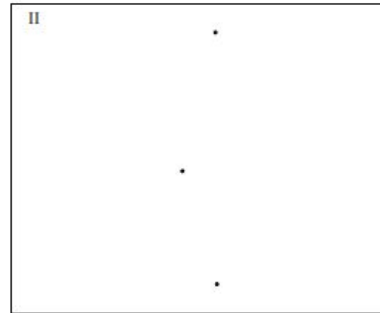
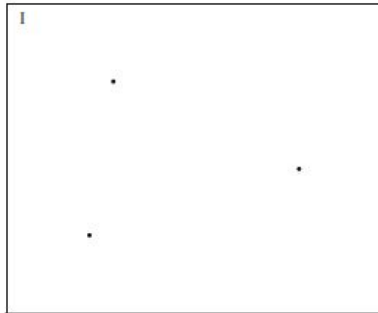
Was ist eigentlich ein Voronoi-Diagramm?



Beispiele



Wie sieht hier jeweils das Voronoi-Diagramm aus?

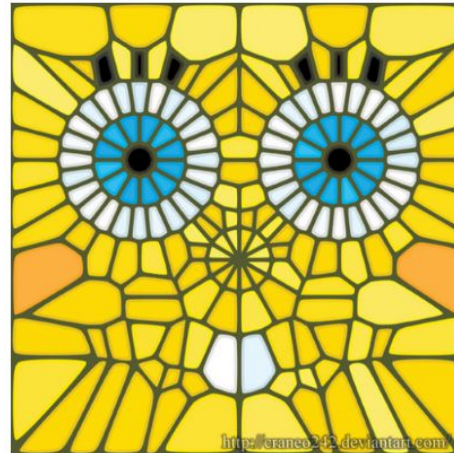


GeoGebra

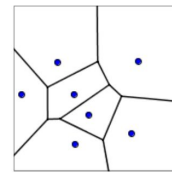
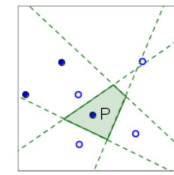
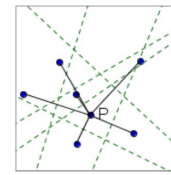
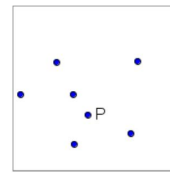
Handgezeichnete Voronoi-Diagramme

SEI KREATIV!

<https://www.geogebra.org/m/wezadxce#material/dperp3dz>



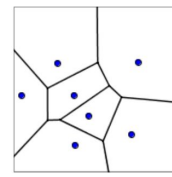
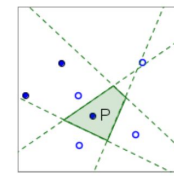
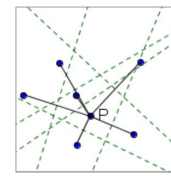
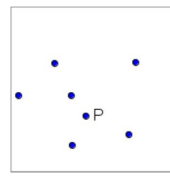
Modellieren mit GeoGebra



Findest du ein Voronoi-Diagramm in der Natur oder in der Kunst oder ???



Was ist noch möglich?

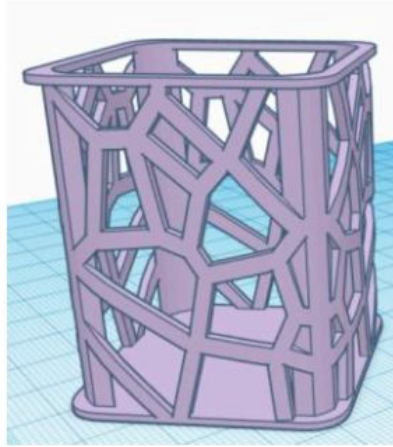
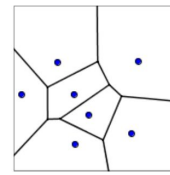
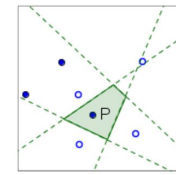
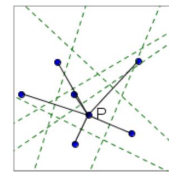
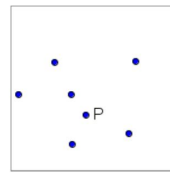


3D Druck

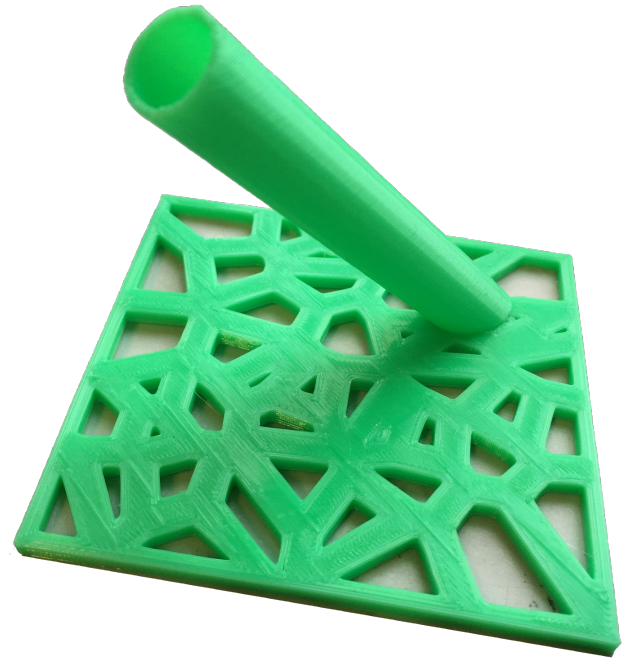
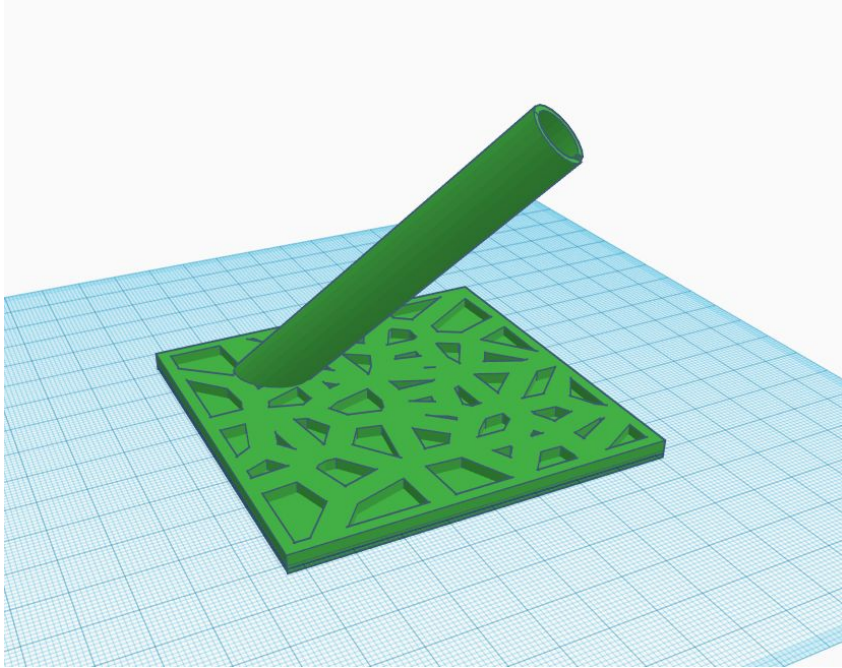
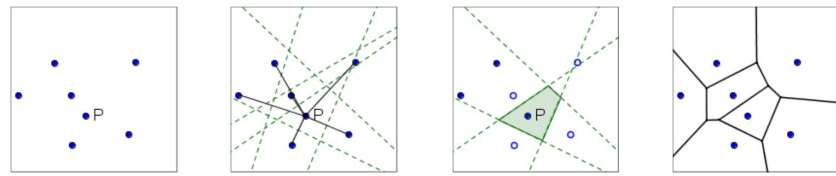
Was möchtest du designen?



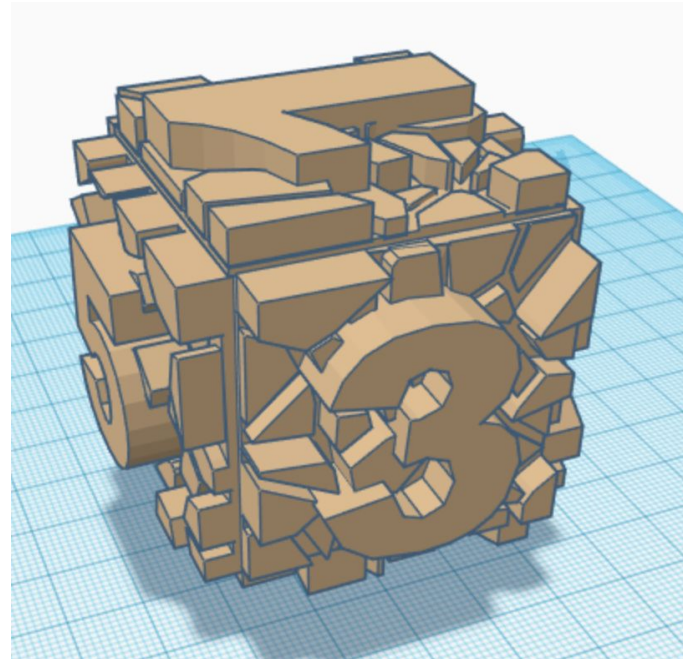
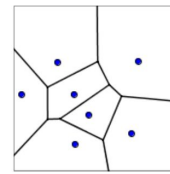
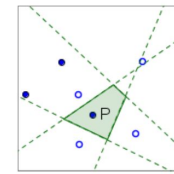
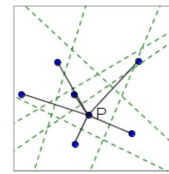
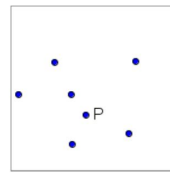
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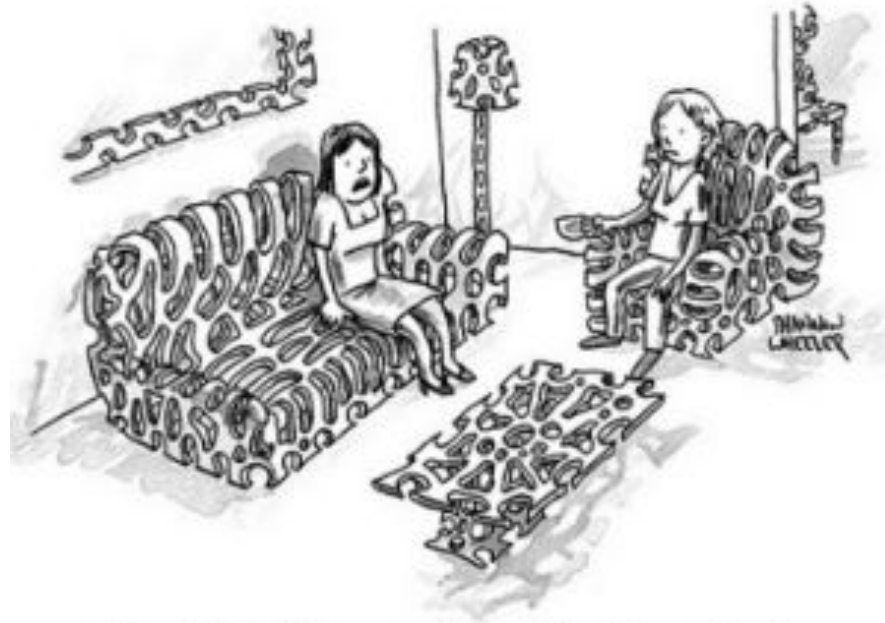
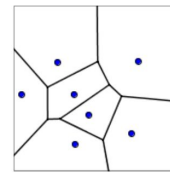
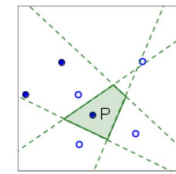
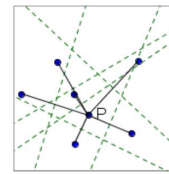
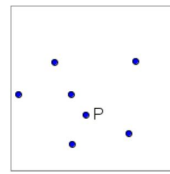
3D Druck



3D Druck



... aber VORSICHT!!!



*“I wish I’d never bought Harold that
3-D printer.”*