Excercise

Let B be the set of all points on the blackboard and let P be a set of m dots $\{p_1, p_2, p_3, \ldots, p_m\}$. Let's partition B into m regions: $\{V_1, V_2, V_3, \ldots, V_m\}$ defined by

$$V_i = \left\{ x \in B \;\middle|\; d(x, p_i) < d(x, p_j)\, \forall j \neq i \right\} \tag{1}$$

with d being the distance – let's use the usual Euclidean distance: $d(a, b) = \sqrt{(b_x - a_x)^2 + (b_y - a_y)^2}$.

Instructions:

1. Grab your favourite colour of chalk!
2. Pick a dot on the board! This is your p_i.
3. Draw your V_i.
4. Don't forget to work with your neighbours!

note: it doesn't have to be perfect!

Voronoi diagram