

Beamer

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2020

Algorithm

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Output: the set of k clusters C_1, \dots, C_k

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for $x \in \{x_1, x_2, \dots, x_n\}$ **do**

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for $x \in \{x_1, x_2, \dots, x_n\}$ **do**

 assign x to the cluster with the closest centroid

end for

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 assign x to the cluster with the closest centroid

end for

for $i \in \{1, 2, \dots, k\}$ **do**

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repeat

for $x \in \{x_1, x_2, \dots, x_n\}$ **do**

 assign x to the cluster with the closest centroid

end for

for $i \in \{1, 2, \dots, k\}$ **do**

 recompute centroid c_i of cluster C_i

end for

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randomly select k points as initial centroids c_1, \dots, c_k

repeat

for $x \in \{x_1, x_2, \dots, x_n\}$ **do**

 assign x to the cluster with the closest centroid

end for

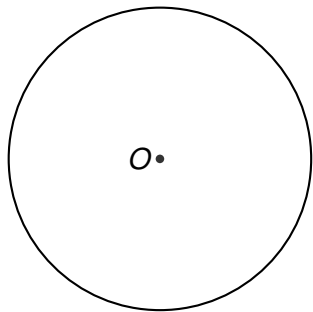
for $i \in \{1, 2, \dots, k\}$ **do**

 recompute centroid c_i of cluster C_i

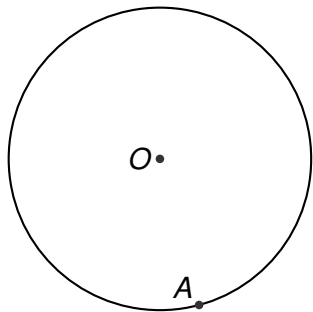
end for

until centroids do not change

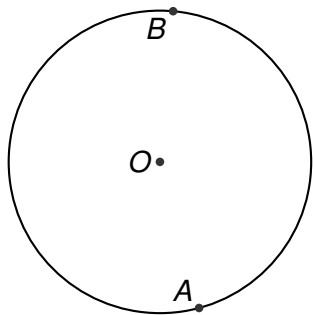
Geometry



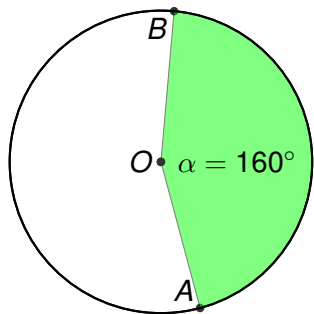
Geometry



Geometry



Geometry



Calendar

January 2020

		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Calendar

January 2020

		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

February 2020

					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	

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January 2020

		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
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March 2020

						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
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6	7	8	9	10	11	12
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April 2020

		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			