Blatt 5

Barth, Kaiser, Nickel

28. November 2017

1 Aufgabe 17:

1.1 Erste Iteration

Cluster 1:
[1 ,6]

Cluster 2:
[1 ,4]
 [1 ,5]
 [3 ,2]
 [3 ,3]
 [4 ,1]

Cluster 3:
[5 ,1]
 [6 ,2]
 [6 ,3]
 [8 ,4]
 [8 ,5]
 [8 ,6]

Aktualisieren:
$\mu_1 = [\ \ 1\ ,6]$
$\mu_2 = [\ \ 1\ 2/5,\ 15/5]$
$\mu_3 = [\ \ 4\ 1/6,\ 21/6]$

1.2 Zweite Iteration

Cluster 1:
[1 ,6]
 [1 ,5]

Cluster 2:
[1 ,4]
 [3 ,2]
 [3 ,3]
 [4 ,1]

Cluster 3:
[5 ,1]
 [6 ,2]
 [6 ,3]
 [8 ,4]

[8 ,5]
[8 ,6]

Aktualisieren:
$\mu_1 = [\quad 1 ,5.5]$
$\mu_2 = [\quad 1\ 1/4,\ 10/4]$
$\mu_3 = [\quad 4\ 1/6,\ 21/6]$

1.3 Dritte Iteration

Cluster 1:
[1 ,6]
 [1 ,5]
 [1 ,4]

Cluster 2:
[3 ,2]
 [3 ,3]
 [4 ,1]
 [5 ,1]

Cluster 3:
[6 ,2]
 [6 ,3]
 [8 ,4]
 [8 ,5]
 [8 ,6]

Aktualisieren:
$\mu_1 = [\quad 1\ ,\ 5]$
$\mu_2 = [\quad 1\ 5/4,\ 7/4]$
$\mu_3 = [\quad 3\ 6/5,\ 20/5]$

1.4 Vierte Iteration

Cluster 1:
[1 ,6]
 [1 ,5]
 [1 ,4]

Cluster 2:

[3 ,2]
[3 ,3]
[4 ,1]
[5 ,1]
[6 ,2]

Cluster 3:
[6 ,3]
[8 ,4]
[8 ,5]
[8 ,6]

Aktualisieren:
$\mu_1 = [\ \ 1\ ,\ 5]$
$\mu_2 = [\ \ 2\ 1/5,\ 10/5]$
$\mu_3 = [\ \ 3\ 0/4,\ 18/4]$

1.5 Fünfte Iteration

Cluster 1:
[1 ,6]
[1 ,5]
[1 ,4]

Cluster 2:
[3 ,2]
[3 ,3]
[4 ,1]
[5 ,1]
[6 ,3]
[6 ,2]

Cluster 3:
[8 ,4]
[8 ,5]
[8 ,6]

Aktualisieren:
$\mu_1 = [\ \ 1\ ,\ 5]$
$\mu_2 = [\ \ 2\ 7/6,\ 12/6]$
$\mu_3 = [\ \ 2\ 4/3,\ 15/3]$