Treshold voor isCirle:

Treshold bij deze testen ingesteld op: diff/approx < 8

**In het rood: figuren die niet herkent zijn als circles. In het groen geen circles met een lage diff/approx waarde. Als er net onder circle staat zijn ze herkend.**

b106:

Center:x:240.04545454545453y:578.8939393939394diff/approx:34.05684269366523

Area too low!

Center:x:7.170731707317073y:484.9268292682927diff/approx:57.80305814791206

Center:x:423.1969696969697y:399.04545454545456diff/approx:15.003968404117103

Center:x:191.17142857142858y:312.2857142857143diff/approx:1.3054495726503228

Circle

Center:x:601.6071428571429y:211.25diff/approx:0.5384954249164527

Circle

Center:x:375.7175572519084y:128.45038167938932diff/approx:14.703355317630496

Center:x:148.87254901960785y:41.85294117647059diff/approx:12.503478238275797

Center:x:775.7156862745098y:38.30392156862745diff/approx:16.116022125738493

b107:

Center:x:663.7361111111111y:569.6527777777778diff/approx:1.0026873978577167

Circle

Center:x:416.46774193548384y:503.01612903225805diff/approx:15.295411631684482

Center:x:164.21212121212122y:439.3939393939394diff/approx:5.306532285566697

Circle

Center:x:589.3157894736842y:298.280701754386diff/approx:18.340992813965947

Center:x:341.89473684210526y:233.47368421052633diff/approx:1.6396726280007583

Circle

Center:x:111.09375y:149.6875diff/approx:11.761241298303625

Center:x:749.1343283582089y:102.49253731343283diff/approx:21.57271999527719

Center:x:516.0y:38.925925925925924diff/approx:21.966975308474915

b108(slechte findcontours):

Center:x:229.0y:554.1166666666667diff/approx:16.9952982462206

Center:x:23.612903225806452y:432.4193548387097diff/approx:14.539125426518103

Center:x:431.6046511627907y:364.8837209302326diff/approx:34.99346696420411

Center:x:204.328125y:263.328125diff/approx:0.2019373332413987

Circle

Center:x:609.8468468468468y:217.07207207207207diff/approx:9.216318244027105

Center:x:10.694915254237289y:164.11864406779662diff/approx:34.11550481108499

B109 (grote hoogte):

Area too low!

Center:x:355.47058823529414y:538.4509803921569diff/approx:10.81057293710727

Area too low!

Center:x:688.3939393939394y:323.57575757575756diff/approx:18.631821200882168

Center:x:471.5090909090909y:327.1090909090909diff/approx:1.8635470243369483

Circle

Center:x:243.12727272727273y:308.2diff/approx:1.171697856372375

Circle

Center:x:19.833333333333332y:301.6666666666667diff/approx:10.868429493052915

Center:x:589.18y:110.1diff/approx:3.907175967965967

Circle

Center:x:364.27906976744185y:96.44186046511628diff/approx:8.662189682722255

Center:x:147.87037037037038y:93.98148148148148diff/approx:9.618446702106782

B110 (grote hoogte!):

Area too low!

Center:x:199.5686274509804y:546.0diff/approx:1.6441295924499886

Circle

Center:x:780.9571428571429y:462.1142857142857diff/approx:38.13797570070822

Area too low!

Center:x:351.2037037037037y:356.6111111111111diff/approx:7.720587569399442

Circle

Center:x:351.2037037037037y:356.6111111111111diff/approx:7.720587569399442

Circle

Center:x:136.01960784313727y:300.3921568627451diff/approx:1.507315504511471

Circle

Center:x:716.2083333333334y:219.95833333333334diff/approx:5.349196646736009

Circle

Center:x:716.2083333333334y:219.95833333333334diff/approx:5.349196646736009

Circle

Center:x:496.62264150943395y:175.9245283018868diff/approx:1.6323081936149977

Circle

Center:x:291.1896551724138y:120.82758620689656diff/approx:4.350199903816745

Circle

Center:x:291.1896551724138y:120.82758620689656diff/approx:4.350199903816745

Circle

Center:x:80.77173913043478y:64.18478260869566diff/approx:8.95938554744328

Center:x:645.9666666666667y:15.45diff/approx:25.617467553182795

Before removing contour size:0

After removing and adding:11

Area too low!

Center:x:199.5686274509804y:546.0diff/approx:1.6441295924499886

Circle

Center:x:780.9571428571429y:462.1142857142857diff/approx:38.13797570070822

Area too low!

Center:x:136.01960784313727y:300.3921568627451diff/approx:1.507315504511471

Circle

Center:x:496.62264150943395y:175.9245283018868diff/approx:1.6323081936149977

Circle

Center:x:80.77173913043478y:64.18478260869566diff/approx:8.95938554744328

Center:x:645.9666666666667y:15.45diff/approx:25.617467553182795

B111 (grote hoogte):

Center:x:692.3018867924528y:533.1320754716982diff/approx:7.505061088832413

Circle

Area too low!

Center:x:6.222222222222222y:500.25diff/approx:27.38274047165116

Area too low!

Center:x:791.2173913043479y:306.4782608695652diff/approx:36.77730946891358

Center:x:576.4150943396227y:294.24528301886795diff/approx:2.4668963444129153

Circle

Center:x:114.39393939393939y:275.1818181818182diff/approx:6.092339274219574

Circle

Center:x:690.6y:72.48diff/approx:14.997833064417097

Center:x:466.9807692307692y:69.01923076923077diff/approx:10.482135865865823

Center:x:239.96666666666667y:64.5diff/approx:1.1101842673658076

Circle

Center:x:25.466666666666665y:57.6diff/approx:6.212915433838599

Circle

* Conclusies. Algoritme lijkt te werken voor gewone hoogtes. Als de hoogtes groter worden, worden meer figuren fout herkend.. Maar de figuren die juist als cirkel herkend worden hebben een kleinere diff/approx. Dus als hoogte omhoog gaat, gaat de pixeloppervlakte omlaag. Indien we bij een lagere pixeloppervlakte zitten, dan een tresholdpixeloppervlakte kunnen we de isCircle treshold verlagen. De treshold bij grote hoogte wordt ingesteld op 3. Testen volgen:
* Als we naar de cirkels kijken die bij gewone hoogte wel herkend worden. Is de treshold van 8 iets te groot. Deze wordt verlaagt naar 7. (Misschien zelfs nog te hoog).