

[Dashboard](#) / [My courses](#) / [XLAN7FA23](#) / [Chương 7: Trích suất đặc trưng của ảnh](#) / [Chapter 7 review](#)

**Started on** Saturday, 25 November 2023, 10:23 AM

**State** Finished

**Completed on** Saturday, 25 November 2023, 10:26 AM

**Time taken** 3 mins 38 secs

**Marks** 8.00/9.00

**Grade** 8.89 out of 10.00 (89%)

Question **1**

Complete

Mark 1.00 out of 1.00

Q7. What happens to the resulting polygon if the error threshold is set to zero in the merging method?

Select one:

- ☐ a. Forms a polygon with maximum perimeter.
- ☒ b. Contains all the boundary pixels.
- ☐ c. Excludes boundary pixels.
- ☐ d. Includes only the inflection points.

Question **2**

Complete

Mark 1.00 out of 1.00

Q1. How does redefining the starting point of a chain code affect its independence from the initial starting point on the boundary?

Select one:

- ☒ a. Remains independent of the initial starting point.
- ☐ b. Results in a unique sequence for each starting point.
- ☐ c. Changes the structure of the circular sequence.
- ☐ d. Introduces inconsistencies in the circular sequence.



Question **3**

Complete

Mark 1.00 out of 1.00

Q9. Which statement is true regarding two boundary shapes with the same mean and third statistical moment descriptors but different second moments?

Select one:

- ☐ a. They have identical shapes.
- ☐ b. They exhibit symmetry in the second moment.
- ☒ c. They have different spreads in the second moment.
- ☐ d. Their signatures are not comparable.

Question **4**

Complete

Mark 1.00 out of 1.00

Q3. How does the first difference of a chain code relate to rotation normalization?

Select one:

- ☐ a. Introduces rotation-dependent elements.
- ☐ b. Disrupts the circular sequence.
- ☐ c. Is affected by the direction of rotation.
- ☒ d. Is independent of boundary rotation.

Question **5**

Complete

Mark 0.00 out of 1.00

Q5. Why does the rubber-band polygonal approximation approach yield a polygon with minimum perimeter?

Select one:

- ☐ a. Follows a clockwise direction.
- ☒ b. Minimizes the number of vertices.
- ☐ c. Restricts the locations of the vertices.
- ☐ d. Enforces straight lines between vertices.

Question **6**

Complete

Mark 1.00 out of 1.00

Q2. What is the normalized starting point of the code 11076765543322?

Select one:

- ☐ a. 322110767655433
- ☐ b. 011076765543322
- ☒ c. 07676554332211
- ☐ d. 11076765543322

Question **7**

Complete

Mark 1.00 out of 1.00

Q8. How does setting the error threshold to zero affect the splitting method in polygonal approximations?

Select one:

- ☐ a. Has no effect on the resulting polygon.
- ☐ b. Forms polygons with minimal perimeter.
- ☐ c. Excludes boundary pixels.
- ☒ d. Generates disconnected polygons.

Question **8**

Complete

Mark 1.00 out of 1.00

Q6. In the rubber-band polygonal approximation approach, what is the maximum possible error in a cell if each cell corresponds to a pixel on the boundary?

Select one:

- ☐ a. Square root of  $d$  multiplied with 2
- ☒ b. Square root of 2 multiplied with  $d$
- ☐ c.  $d$  divided by square root of 2
- ☐ d. Square root of 2 multiplied with  $d$  then divided by 2

Question **9**

Complete

Mark 1.00 out of 1.00

Q4. What is the result of computing the first difference of the code 0101030303323232212111?

Select one:

- ☒ a. 3131331313031313031300
- ☐ b. 0101030303323232212111
- ☐ c. 2111010323113033223232
- ☐ d. 3033232322121110103

◀ [Code4: Find the automatic threshold using Isodata algorithm](#)

Jump to...

[Shape signature 1](#) ▶