1. Which of the following steps occurs with bagOfFeatures but does not occur when using hand-selected features?

1/1 point

- Extracting feature descriptors
- Creating a visual vocabulary
- Using predictor features to train a model

Correct

The step of clustering extracted feature descriptors into a new visual vocabulary occurs only in bagOfFeatures

Consider the following set of predictor features created using bagOfFeatures:

Row 1	0.04	0.02	0	0.08
Row 2	0	0.06	0	0.06
Row 3	0.14	0.06	0.14	0
Row 4	0	0.06	0.06	0.12
Row 5	0.02	0.02	0.06	0.1
Row 6	0	0.25	0	0.25
Predictor Features				

Not enough information to say

3. How many visual words were created for these predictor features?

2. How many images were used to create these predictor features?

1/1 point

Correct

The rows of the bagoffeatures predictor feature table correspond to the number of images in the training set.



Not enough information to say

1/1 point

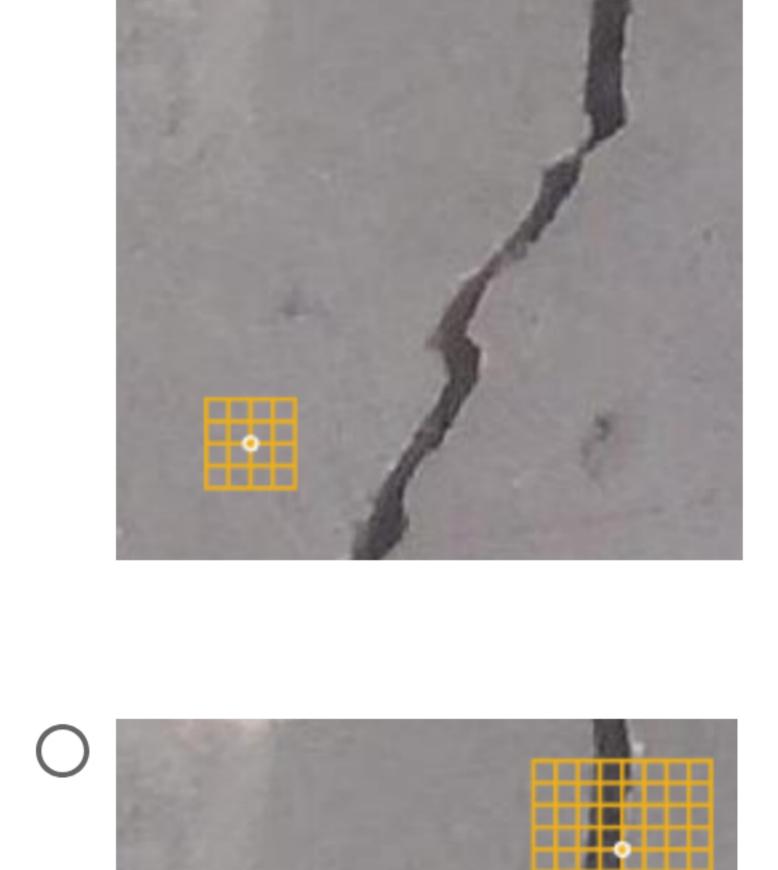
1/1 point

4. The following image represents a single feature extraction neighborhood with a block width of 32:

Correct

The columns of the bagoffeatures predictor feature table correspond to the number of visual words.





**⊘** Correct Instead of a 32-by-32 pixel neighborhood block, this image contains a 64-by-64 pixel neighborhood. This increases the size of, but not the number of, sub-regions within the neighborhood. Consider the following traffic signs:



Later in this course, you will get a chance to apply your conclusions when you train a model that classifies traffic signs.

following two questions will ask you to consider which bagoffeatures parameters would best extract those features.

If your goal is to train a model that classifies traffic sign images like these, what predictor features would be most effective? The

Detection

5. Consider the large, blank areas on the faces of the signs.

Given this detail, which point selection method would be most effective?

1/1 point

1/1 point

differentiate them, you should use "grid" point selection to extract features evenly over the whole image.

Correct

Grid

6. The images of the traffic signs appear blurry, indicating that they are low-resolution images.

Imagine that, after using the default bagoffeatures parameters to train a model, you are unhappy with the

Because the shape of the large sections of similarly textured blank spaces on the signs are crucial to

results. What change might have the most significant impact on small, low-resolution images? Decreasing grid step size

Increasing grid step size

should have larger grid step sizes.

Correct

In general, lower-resolution images should have smaller grid step sizes, and higher-resolution images