

## Feedback — Week 1 Quiz

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Thank you. Your submission for this quiz was received.

You submitted this quiz on **Sat 25 Jul 2015 7:30 AM PDT**. You got a score of **10.00** out of **10.00**.

### Question 1

Which kind of visualization would you use to try to answer a personal question about your data?

Your Answer	Score	Explanation
<input type="radio"/> Presentation visualization		
<input type="radio"/> Interactive storytelling		
<input checked="" type="radio"/> Interactive visualization	✓ 1.00	
Total	1.00 / 1.00	

#### Question Explanation

Interactive visualization is a mode of visualization that allows a single investigator to interact with data to answer a question, even though the results are not very polished for presentation.

### Question 2

Which kind of visualization would you use to share a discovery about your data with your colleagues in a slide show?

Your Answer	Score	Explanation
<input type="radio"/> Interactive visualization		
<input checked="" type="radio"/> Presentation visualization	✓ 1.00	
<input type="radio"/> Interactive storytelling		
Total	1.00 / 1.00	

**Question Explanation**

Presentation visualization uses a polished presentation of your data to communicate your insight into the data to a larger group, but does not allow them to interact with the data visualization.

## Question 3

Which kind of visualization would you use to create a webpage that allows viewers to see a visualization of data that you prepared, but also allows the viewer to further investigate the data?

Your Answer	Score	Explanation
<input type="radio"/> Presentation visualization		
<input type="radio"/> Interactive visualization		
<input checked="" type="radio"/> Interactive storytelling	✓ 1.00	
Total	1.00 / 1.00	

**Question Explanation**

Like presentation visualization, interactive storytelling can be highly polished and intended for a mass audience, but like interactive visualization, it rerenders the display based on user input to allow further investigation by the viewer.

## Question 4

In what order does a data visualization graphics pipeline process information?

Your Answer	Score	Explanation
<input type="radio"/> Rasterization, then pixel processing, then vertex processing		
<input type="radio"/> Vertex processing, then pixel processing, then rasterization		
<input type="radio"/> Rasterization, then vertex processing, then pixel processing		
<input checked="" type="radio"/> Vertex processing, then rasterization, then pixel processing	✓ 1.00	

☐ Pixel processing, then vertex processing, then rasterization

☐ Pixel processing, then rasterization, then vertex processing

Total 1.00 / 1.00

#### Question Explanation

The graphics pipeline accepts vector graphics primitives described as vertices, so it processes vertices first. Rasterization converts vector graphics primitives into the pixel locations used to display them on a display screen. Pixel processing is used to further process the pixels output from rasterization, e.g., to compute their individual colors.

## Question 5

How many items can human working memory (short-term memory) typically hold?

Your Answer	Score	Explanation
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<input checked="" type="radio"/> 3–7 items	✓ 1.00	
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☐ 30–70 items

☐ 300–700 items

Total 1.00 / 1.00

#### Question Explanation

Our working memory can only hold 3–7 items at a time, though a single item in our working memory can be a collection of items in our long-term memory.

## Question 6

A light gray box drawn on top of a dark gray background will make the light gray box appear

\_\_\_\_\_.

Your Answer	Score	Explanation
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☐ The same as it appears on a white background

☐ Darker

☒ Brighter

✓ 1.00

Total

1.00 / 1.00

#### Question Explanation

The dark gray box will make the light gray box appear even brighter because the human visual system's lateral inhibition will detect and accentuate the difference.

## Question 7

When visualizing data, you should keep your eyes focused on one point for the entire duration of the visualization.

#### Your Answer

Score

Explanation

☐ True, because your visual system will better detect any changes to datapoints during the visualization.

☒ False, because your visual system will play tricks on your perception of the data.

✓ 1.00

Total

1.00 /  
1.00

#### Question Explanation

As we showed in the slides, focusing on a single point causes a temporal inhibition in the light sensors and can play tricks on your perception.

## Question 8

On which of these colors does the human eye have the most difficulty focusing?

#### Your Answer

Score

Explanation

☐ Green

☐ Yellow

☐ Red

☒ Blue

✓

1.00

Total

1.00 / 1.00

**Question Explanation**

Because of the chromatic aberration of the eye's lens, the blue end of the optical spectrum of light tends to focus off the retina. If you have sharp detail that needs to be displayed in a shade of blue, try to avoid pure blue hues.

## Question 9

Which one of the 3-D depth cues below is the strongest?

Your Answer	Score	Explanation
<input checked="" type="radio"/> Occlusion	✓ 1.00	
<input type="radio"/> Shadowing		
<input type="radio"/> Lighting		
<input type="radio"/> Stereopsis		
Total	1.00 / 1.00	

**Question Explanation**

Occlusion is the strongest cue, because if a point on object A and object B project to the same point on the image plane, the fact that you see object A and not object B at that point provides incontrovertible evidence of a depth ordering that A is closer than B.

## Question 10

Given a plot of life expectancy based on country and birth year, you look up your country and birth year and find the displayed life expectancy, and conclude you will probably live that long. This is an example of \_\_\_\_\_.

Your Answer	Score	Explanation
<input checked="" type="radio"/> Deductive reasoning	✓ 1.00	
<input type="radio"/> Subductive reasoning		
<input type="radio"/> Inductive reasoning		
<input type="radio"/> Abductive reasoning		
Total	1.00 / 1.00	

**Question Explanation**

This is an example of deductive reasoning because we are drawing the conclusion implied by the given data.