Answer Key – Intro to Data for Data Science

1. What do we use to describe observations of our world?

- ☐ science
- ☐ technology
- ☑ data
- ☐ mathematics

Section 2-2: Data are a collection of symbols that describe observations of the world around us.

2. Which of the following steps is part of the data-driven decision-making process?

- ☐ Make a profit
- ☐ Summarize our findings
- ☑ Take action
- ☐ Communicate the results

Section 2-6: The data-process moves from collecting data to taking action to achieve a goal.

3. Which of the following is one of the two main types of data?

- ☐ Symbolic
- ☐ Instrumental
- ☑ Categorical
- ☐ Binary

Section 3-2: The two main types of data in data science are categorical and numerical data.

4. Which of the following is one of the four subtypes of data?

- ☑ Nominal
- ☐ Symbolic
- ☐ Mathematical
- ☐ Binary

Section 3-3: The four subtypes of data are nominal, ordinal, interval, and ratio data.

5. Which of the following is a scalar data type?

- ☐ Table
- ☐ Graph
- ☑ Integer
- ☐ Vector

Section 4-4: An integer is a scalar data type that represents a whole number.

6. Which of the following is a composite data type?

- ☑ Table
- ☐ Decimal
- ☐ Date/Time
- ☐ Boolean

Section 4-6: A table is a composite data type that can store values in rows and columns.

7. What do we typically store on the rows of a table?

- ☐ Variables
- ☑ Observations
- ☐ Queries
- ☐ Relationships

Section 5-3: Observations are typically stored on the rows (horizontal groups) of a table.

8. What do we typically store on the columns of a table?

- ☑ Variables
- ☐ Queries
- ☐ Observations
- ☐ Relationships

Section 5-4: Variables are typically stored on the columns (vertical groups) of a table.

9. Which of the following is a step in the data life cycle?

- ☐ Refactoring
- ☐ Regeneration
- ☐ Hypothesis
- ☑ Collection

Section 6-2: The stages are collection, storage, processing, analysis, action, and repeat.

10. What is the purpose of feedback in the data life cycle?

- ☐ Refactoring solutions
- ☐ Eliminating outliers
- ☑ Continuous improvement
- ☐ Avoiding bias

Section 6-7: The feedback loop drives continuous improvement in our business processes over time.