Representing a Quantitative Variable with Graphs Quiz

1. Which of the following describes a continuous variable?

(A) The number of items sold at a craft booth for one day

(B) The number of apps downloaded from a website one day

(C) The diameters of the tree trunks at an evergreen farm ✓

(D) The number of baskets made by a basketball player

(E) The shoe sizes of all shoes on sale at a department store

Answer C

Correct. Diameter is a measure of length, and length is continuous because no matter how small the difference is between any two lengths, another fractional length exists between those lengths.

2. Data will be collected on the following variables. Which variable can be considered discrete?

(A) The height of a person

(B) The weight of a person

(C) The length of a person's arm span

(D) The time it takes for a person to solve a puzzle

(E) The number of books a person finished reading last month ✓

Answer E

Correct. The number of books is a counting number which, like all whole numbers, is discrete.

3. The following list shows the number of video games sold at a game store each day for one week.

15, 43, 50, 39, 22, 16, 20

Which of the following is the best classification of the data in the list?

(A) Categorical and continuous

(B) Quantitative and continuous

(C) Categorical and discrete

(D) Quantitative and discrete ✓

(E) Neither categorical nor quantitative, and neither discrete nor continuous

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Answer D

Correct. The number of games sold is quantitative because it is measurable. The number of games sold is also a whole number, and whole numbers are discrete.