



SAMPLES OF STANDARDS STUDENTS ARE LEARNING THIS NINE WEEKS:

6th Grade Math

STANDARDS: 6.SP.1, 6.SP.3, 6.SP.5c, 6.EE.2a, 6.EE.2b, 6.EE.5, 6.EE.6, 6.EE.9

6.SP.1: Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, “How old am I?” is not a statistical question, but “How old are the students in my school?” is a statistical question because one anticipates variability in students’ ages.

A survey conducted at a local pet store included a section about dogs. Which of these questions is a statistical question and should be included on the survey?

- A** How many legs does a dog have?
- B** How many dogs do you own?
- C** Is a veterinarian a doctor for dogs?
- D** Is a kennel a shelter for dogs?

Answer B is correct.

6.SP.3: Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.

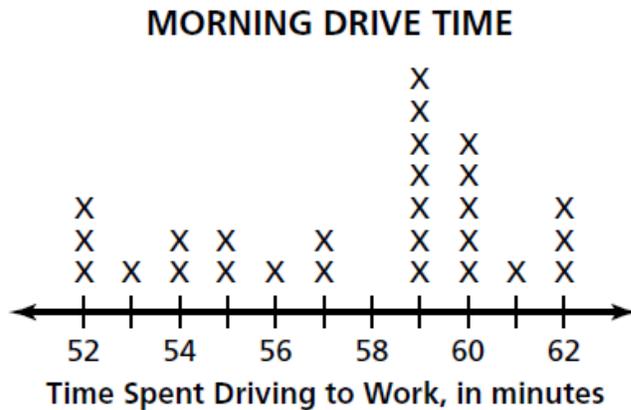
Which statement about a data set provides the most information about the variability of the data?

- A** The mean of the data set is 28.
- B** The median of the data set is 30.
- C** The range of the data set is 18.
- D** The maximum of the data set is 40.

Answer C is correct.

6.SP.5c: Summarize numerical data sets in relation to their context, such as by: Giving quantitative measures of center (median and/or mean) and variability (interquartile range), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.

The line plot below shows the number of minutes it took Greg to drive to work each morning for the last 27 days.



Which statements are true? Select all that apply.

- A** On more than half the mornings it took Greg longer than 57 minutes to get to work.
- B** The greatest amount of time it took Greg to get to work was 59 minutes.
- C** The amount of time it took Greg to get to work that occurred most frequently was 59 minutes.
- D** The times it took Greg to get to work were evenly distributed between 52 and 62 minutes.
- E** The least amount of time it took Greg to get to work was 52 minutes.

Answers A, C, and E are correct.

6.EE.2a: Write, read, and evaluate expressions in which letters stand for numbers. Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation “Subtract y from 5” as $5 - y$.

A kitchen makes 2,944 ounces of soup each week. There are 128 ounces in 1 gallon. Which expression describes the number of gallons of soup the kitchen makes in w weeks?

- A** $(2,944 \times 128) \times w$
- B** $2,944(128 \div w)$
- C** $w \times (2,944 - 128)$
- D** $(2,944 \div 128) \times w$

Answer D is correct.

6.EE.2b: Write, read, and evaluate expressions in which letters stand for numbers. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.

Marquese simplified the expression $14 + (1,496 \div 22)$. Which word describes the part of the expression in parentheses?

- A** sum
- B** factor
- C** coefficient
- D** quotient

Answer D is correct.

6.EE.5: Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.

Julian spent the same amount of money each day on his 6-day vacation. He spent less than \$300 on vacation. Which dollar amounts could represent the amount Julian spent each day? Select all that apply.

- A \$42
- B \$44
- C \$46
- D \$48
- E \$50
- F \$52

Answers A, B, C, and D are correct.

6.EE.6: Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.

Andy, Fergus, Evelyn, and Margaret are collecting cans for recycling. Before lunch on Saturday they have collected a total of 173 cans. At the end of the day, the total number of cans collected can be represented by the expression $173 + n$.

You know that Margaret collected some cans in the afternoon. What could the variable n in the expression represent? Select all that apply.

- A the combined number of cans all four students collected in the afternoon
- B the combined number of cans Andy and Margaret collected in the afternoon
- C the combined number of cans Andy and Fergus collected in the afternoon
- D the number of cans Margaret collected in the afternoon
- E the number of cans Evelyn collected in the afternoon
- F the combined number of cans Margaret and Evelyn collected in the afternoon

Answers A, B, D, and F are correct.

6.EE.9: Use variables to represent two quantities in a real-world problem that change in relationship to one another. x Write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. x Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.

A painter charges \$20 for every hour that he paints. Let h equal the number of hours he paints and e equal his earnings. Which equations represent the situation? Mark all that apply.

A $e = 20h$

B $h = 20 + e$

C $20 = h + e$

D $20 = h \times e$

E $\frac{e}{h} = 20$

Answers A and E are correct.