

Essential Elements: High School: Statistics and Probability

Interpreting Categorical and Quantitative

Data **S-ID**

A Summarize, represent, and interpret data on a single count or measurement variable. (M) **M.SP.ID.A**

- 1 Given data, construct a graph (line, pie, bar, or picture) or table and interpret the data. **M.EE.SP.ID.1**
- 2 Given data, construct a graph (line, pie, bar, or picture) or table and interpret the data. **M.EE.SP.ID.2**
- 3 Interpret trends on a graph or chart. **M.EE.SP.ID.3**
- 4 Calculate the mean of a given data set. **M.EE.SP.ID.4**

B Summarize, represent, and interpret data on two categorical and quantitative variables. (M) **M.SP.ID.B**

- 5 Not applicable. See M.EE.F.IF.1.
- 6 Not applicable.

C Interpret linear models (M) **M.SP.ID.C**

- 7 Not applicable. See M.EE.F.IF.4.
- 8 Not applicable.
- 9 Not applicable.

Making Inferences and Justifying Conclusions **S-IC**

A Understand and evaluate random processes underlying statistical experiments. (M) **M.SP.IC.A**

- 1 Determine the probability of an event occurring when the outcomes are equally likely to occur. **M.EE.SP.IC.1**
- 2 Determine the probability of an event occurring when the outcomes are equally likely to occur. **M.EE.SP.IC.2**
- 3 Not applicable. See M.EE.SP.ID.1.
- 4 Not applicable. See M.EE.SP.ID.1.
- 5 Not applicable. See M.EE.SP.ID.1.

B Make inferences and justify conclusions from sample surveys, experiments, and observational studies. (M) M.SP.IC.B

6 Not applicable. See M.EE.SP.ID.1.

Conditional Probability and the Rules of Probability S-CP

A Understand independence and conditional probability and use them to interpret data. (M) M.SP.CP.A

1 Identify when events are independent or dependent. M.EE.S.CP.1

2 Identify when events are independent or dependent. M.EE.S.CP.2

3 Identify when events are independent or dependent. M.EE.S.CP.3

4 Identify when events are independent or dependent. M.EE.S.CP.4

5 Identify when events are independent or dependent. M.EE.S.CP.5

B Use the rules of probability to compute probabilities of compound events in a uniform probability model. M.SP.CP.B

6 Not applicable. See M.EE.SP.IC.1.

7 Not applicable. See M.EE.SP.IC.1.

8 Not applicable.

9 Not applicable.

Using Probability to Make Decisions S-MD

A Calculate expected values and use them to solve problems. (M) M.SP.MD.A

1 Not applicable.

2 Not applicable.

3 Not applicable.

4 Not applicable.

B Use probability to evaluate outcomes of decisions. (M) M.SP.MD.B

5 Not applicable.

6 Not applicable.

7 Not applicable.