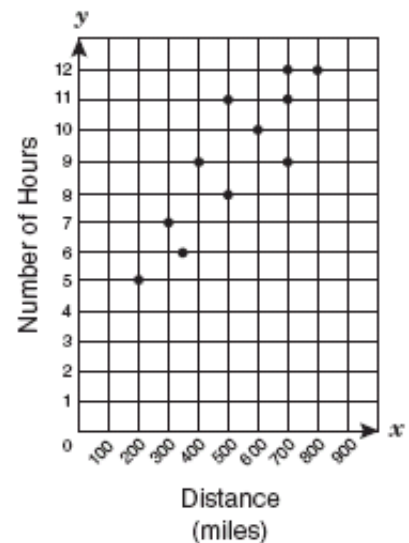Name _____   Date _____

Reporting Category 2 (A.2.D)

1. Monica collected data on the ages and heights of a random sample of sixth-, seventh-, and eighth-grade students at her school. If she plots the data on a scatterplot, what relationship will she most likely see between age and height?

A A negative correlation
B No correlation
C A positive correlation
D A constant correlation

2. The graph below shows the relationship between the distance in miles a delivery truck traveled and the number of hours each delivery took.
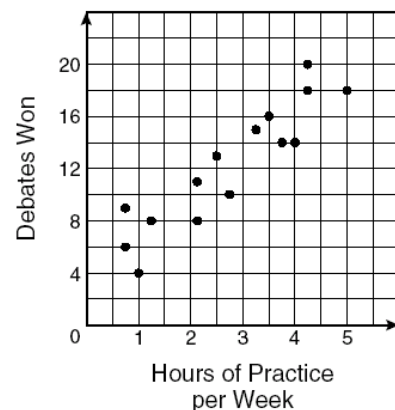
Delivery Truck

Which best describes the relationship shown on the graph?

A Negative trend
B Positive trend
C Constant trend
D No trend

3. The coaches of a group of debate teams answered a survey about hours of debate team practice and number of team wins. The graph shows the results of this survey. Based on these results, if a team practices 4 hours per week next season, which is the best estimate of the number of debates the team can expect to win?
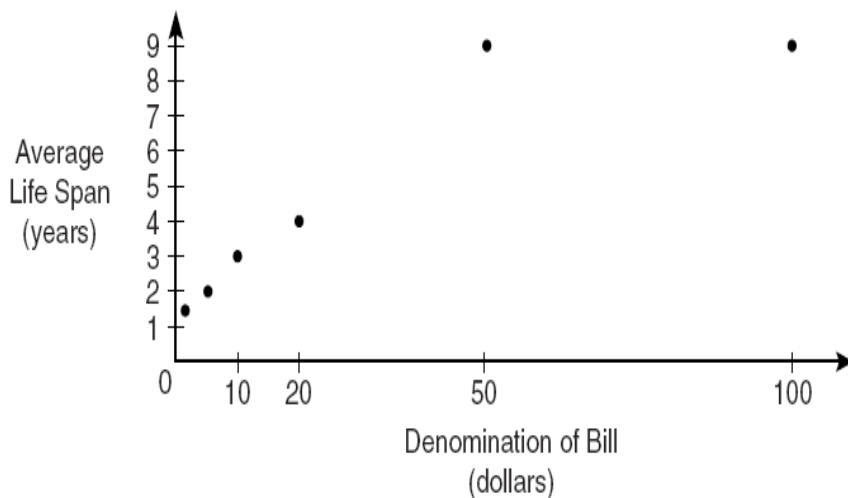
F 1
G 12
H 16
J 20

Reporting Category 2 (A.2.D)

4.   The energy output from a chemical reaction is dependent on the amount of chemicals used. The table shows this relationship. What is a reasonable amount of energy output from the reaction of 32 moles of the chemicals?

Amount of Chemicals (moles)	Energy Output (joules)
5	20
8	32
12	48
15	60

F   77 joules

G   92 joules

H   110 joules

J   128 joules

5.   In the United States, currency is removed from circulation when it wears out. The scatterplot shows the average life span of different denominations of U.S. currency according to the U.S. Federal Reserve System.

Which is a correct conclusion based on the data in this scatterplot?

A   The data represent a linear function.

B   The independent variable is the average life span.

C   The bills of smaller denomination have a longer life span.

D   The average life span of a bill depends on its denomination.