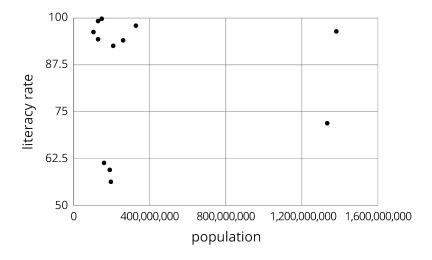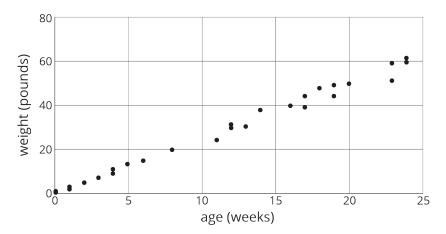# Lesson 7 Practice Problems

1. Literacy rate and population for the 12 countries with more than 100 million people are shown in the scatter plot. Circle any clusters in the data.
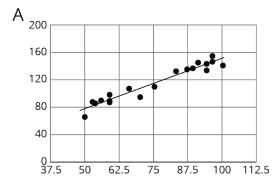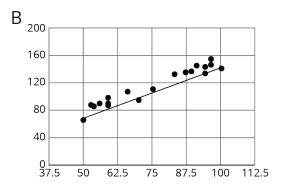

2. Here is a scatter plot:

Select **all** the following that describe the association in the scatter plot:

    A. Linear association

    B. Non-linear association

    C. Positive association

    D. Negative association

    E. No association

Grade 8 Unit 6
Lesson 7

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1

3. For the same data, two different models are graphed. Which model more closely matches the data? Explain your reasoning.
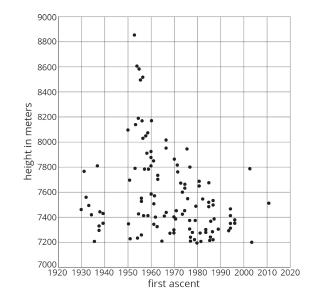
A

B

(From Unit 6, Lesson 5.)

4. Here is a scatter plot of data for some of the tallest mountains on Earth.

The heights in meters and year of first recorded ascent is shown. Mount Everest is the tallest mountain in this set of data.

a. Estimate the height of Mount Everest.

b. Estimate the year of the first recorded ascent of Mount Everest.

(From Unit 6, Lesson 3.)

5. A cone has a volume V, radius r, and a height of 12 cm.

a. A cone has the same height and $\frac{1}{3}$ of the radius of the original cone. Write an expression for its volume.

b. A cone has the same height and 3 times the radius of the original cone. Write an expression for its volume.

(From Unit 5, Lesson 18.)

Grade 8 Unit 6

Lesson 7

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2