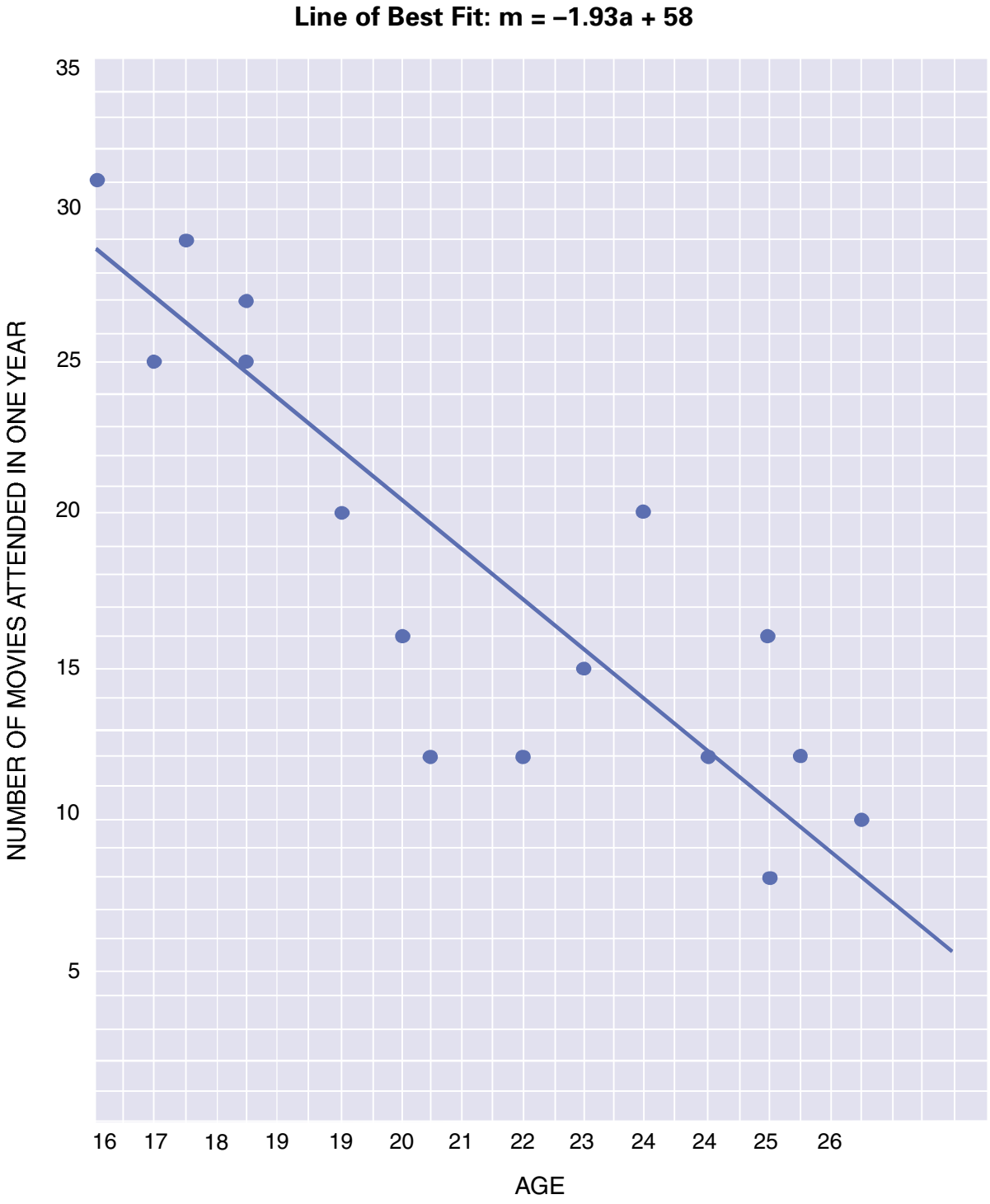
VISUAL 3.1 ▲ Answers to Warm-Up



VISUAL 3.1 (continued)

2. What type of correlation, if any, exists for these data? How do you know?

   Negative. In general, as age increases, the number of movies attended decreases.

3. About how many movies does an average 25-year-old attend in a year?

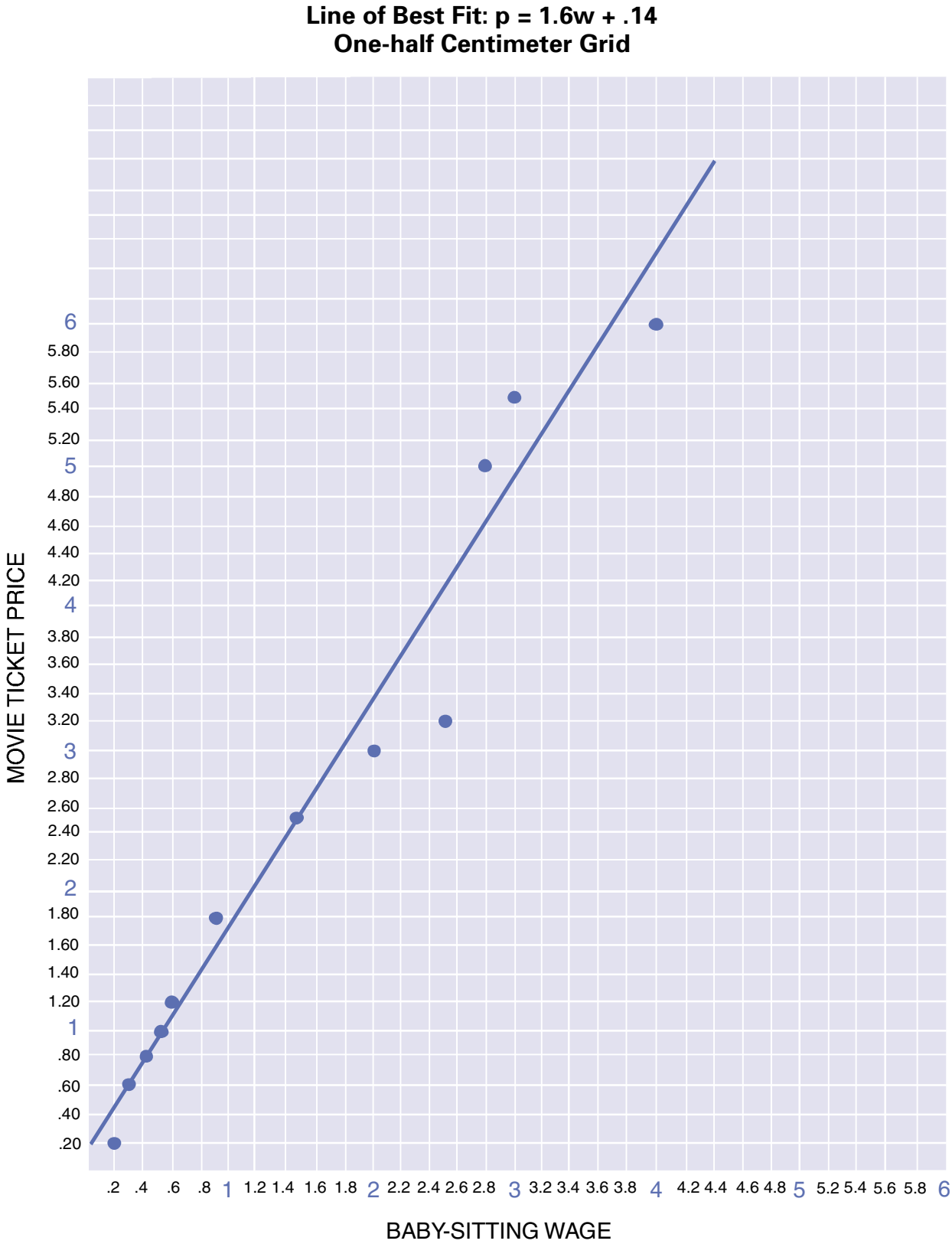
   About 10.

4. From the data in the scatter plot, how old do you think a person is who attends 16 movies in a year?

   From the data, we could expect such a person to be between 22 to 23 years old.

5. From the data in the scatter plot, how many movies would you predict a 14-year-old would attend in a year? If the trend continues, which is unlikely, a 14-year old might attend about 33 movies. A 30-year-old? If the trend continues, a 30-year old might attend, at most, one movie.

VISUAL 3.2 ▲ Answers to Activity 3.3



VISUAL 3.2 (continued)

2. Draw a line of best fit and answer the questions that follow.

3. What type of correlation, if any, exists for these data?

   Positive correlation.

4. How do you know that this type of correlation exists?

   As the wages paid to baby-sitters increases, so does the price of movie tickets.

5. If movie ticket prices rise, do you think hourly baby-sitting wages will also rise? Why?

   Not necessarily. The fact that the variables are correlated does not mean that a change in one causes a change in the other.

6. If hourly baby-sitting wages decline, do you think movie ticket prices will also decline? Why?

   Not necessarily. The fact that the variables are correlated does not mean that a change in one causes a change in the other.

7. Based on the data, what will happen to the price of movie tickets in 2010?

   Increase.

8. Based on the data, what will happen to baby-sitting wages in 2015?

   Increase.