1. Which graph represents the following situation: A car accelerates and then travels at a constant speed.

A.) [Graph A]  
B.) [Graph B]  
C.) [Graph C]  
D.) [Graph D]

2. What is the rate of change shown by the table and what does it represent?
A.) 14; the amount charged, in dollars, per student
B.) 14; the flat fee charged by Kelly Tours
C.) 100; the amount charged, in dollars, per student
D.) 100; the flat fee charge by Kelly Tours

<table>
<thead>
<tr>
<th>Number of Students (x)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost in Dollars (y)</td>
<td>98</td>
<td>112</td>
<td>126</td>
<td>140</td>
<td>154</td>
</tr>
</tbody>
</table>

3. Identify the relationship as positive, negative, or no correlation.

Water consumption and temperature outside.

4. What is the initial value of the trend line that shows how many sit-ups Tim completes each minute?

[Graph showing Tim's Sit-ups]
5. What is the rate of change of the trend line that shows how many sit-ups Tim completes each minute?

6. Write the equation that could be used to describe the trend line of how many sit-ups Tim completes each minute.

7. Use the equation for the line of best fit to predict how many sit-ups Tim can do in 8 minutes.

8. Use the equation for the line of best fit to predict how long it would take Tim to complete 200 sit-ups.
9. Write an equation that can be used to describe the line of best fit.

10. Write an equation that can be used to describe the line of best fit.

11. Describe the correlation as positive, negative, or no correlation.

12. Which of the three lines shown is the line of best fit? Explain your reasoning.
13. Correct Answers

Describe the correlation as positive, negative, or no correlation.

Minutes of Study

14. Identify the relationship as positive, negative, or no correlation.

The more miles you drive, the less gas in your tank.

15. Identify the relationship as positive, negative, or no correlation.

The number of passengers on a plane, and the amount of luggage that has to be loaded.

16. Identify the relationship as positive, negative, or no correlation.

The number of ice creams sold in July, and the number of people who swim in pools.
17. Which of the three lines shown is the line of best fit? Explain your reasoning.

Which of the following situations corresponds to this graph?
A) Sam gradually accelerated his car to 50 mph from a stop, set his cruise control and traveled at a constant speed, then slowed to a stop.
B) Sam accelerated his car to 50 mph from a stop, stopped at a gas station, then drove home.
C) Sam accelerated his car to 50 mph from a stop, slowed to 30 mph, and then accelerated to 50 mph.
D) Sam slowed his car from 50 mph to 20 mph, accelerated to 50 mph, and then slowed to a stop.

19. To ride go carts at Rick’s Play Zone, it cost $4 per ride plus $3 to rent a helmet. The total cost, y, in dollars, depends on x, the number of times you ride the go carts. Write an equation to represent this situation.

20. For which x-values is the interval decreasing?
A) from x = -5 to x = -2
B) from x = -2 to x = 1
C) from x = 1 to x = 3
D) from x = 3 to x = 5
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Which pair of variables would NOT fit the scatter plot above?
A.) Age of a tadpole and length of their tail
B.) Average temperature and the number of coats sold
C.) The amount of clothes purchased and the amount of money left in a person's wallet
D.) A person's height and their Math grade

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What does the slope of the graph represent?
A.) The total cost to bowl decreases by 5 for each game bowled.
B.) The number of games bowled decreases by 6 for every dollar spent.
C.) The number of games bowled increases by 1 for every 6 dollars spent.
D.) The total cost spent increases by 6 for every game bowled.

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What does the y-intercept of the graph represent?
A.) After bowling 0 games, you will spend 6 dollars
B.) After bowling 1 game, you will spend 6 dollars.
C.) After bowling 0 games, you will spend 0 dollars.
D.) After spending 6 dollars, you will bowl 1 game.

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The scatter plot compares the hours of time players spent practicing baseball, and the number of hits missed during games. If a player spent 5 hours practicing baseball, which would be the best prediction of how many hits they would miss?
A.) 10
B.) 30
C.) 50
D.) 70