| Family <br> Size | Number <br> of <br> Gallons <br> of Milk <br> per week |
| :--- | :--- |
| 1 | 1 |
| 2 | 1.5 |
| 3 | 2.2 |
| 4 | 3.8 |
| 5 | 4.7 |
| 6 | 5 |

1. Draw the line of best fit and then find its equation
2. Interpret the meaning of the slope and $y$-intercept in the context of the problem
3. Use your line of best fit equation to approximate the number of gallons of milk a family of 4 would drink
4. What is the difference between your answer in \#3 and the value in the table.
5. 

Use your calculator to find the line of best fit and the correlation, r.

| Family <br> Size | Number <br> of <br> Gallons <br> of Milk |
| :--- | :--- |
| 1 | 1 |
| 2 | 1.5 |
| 3 | 2.2 |
| 4 | 3.8 |
| 5 | 4.7 |
| 6 | 5 |

2. Interpret the meaning of the slope in the context of the problem
3. Use your line of best fit from \#1 to approximate the number of gallons of milk a family of 4 would drink
4. What is the difference between your answer in \#3 and the value in the table.

| Time in <br> seconds | Weight <br> in <br> pounds |
| :--- | :--- |
| 0 | 180 |
| 1 | 177 |
| 2 | 176 |
| 3 | 175 |
| 4 | 171 |
| 5 | 170 |
| 6 | 168 |

1. Use your calculator to find the line of best fit and the correlation, $r$.
2. Interpret the meaning of the slope and $y$-int in the context of the problem
3. Use your line of best fit from \#1 to approximate the weight at 3 seconds
4. What is the difference between your answer in \#3 and the value in the table.
5. Predict the weight of the object after 9 seconds.
6. Predict the time it will take for the object to reach 140 pounds.
7. Use your calculator to find the line of best fit and the correlation, r.

| Age | Heart <br> Rate | Age | Heart <br> Rate |
| :--- | :--- | :--- | :--- |
| 15 | 60 | 26 | 67 |
| 15 | 70 | 30 | 55 |
| 17 | 72 | 30 | 64 |
| 19 | 70 | 32 | 64 |
| 20 | 62 | 36 | 55 |
| 20 | 68 | 40 | 50 |
| 22 | 68 | 40 | 60 |
| 24 | 71 | 42 | 65 |

2. Interpret the meaning of the slope and $y$-intercept in the context of the problem
3. Use your line of best fit from \#1 to approximate the heart rate at age 22
4. What is the difference between your answer in \#3 and the value in the table.
5. Predict the heart rate at age 50 . Does this make sense.
6. Predict the age that you could expect the heart rate to reach 80.
