**Multiple Choice: [2] points each. You must show work/explain EVERY question for full credit.**

1.) If *x* represents a given number, the expression "5 less than twice the given number" is written as

|  |  |  |  |
| --- | --- | --- | --- |
| 1) |  | 3) |  |
| 2) |  | 4) |  |

1.)\_\_\_\_\_\_\_\_\_

2.) If  and , the value of *y* is

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | 1 | 3) | -10 |
| 2) | 0 | 4) | 10 |

2.)\_\_\_\_\_\_\_\_\_

3.) What is the slope of the linear equation ?

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | 10 | 3) | 2 |
| 2) | -10 | 4) | -15 |

3.)\_\_\_\_\_\_\_\_\_

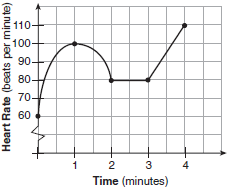
4.) Which value of *x* is in the solution set of ?

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | -3 | 3) | 0 |
| 2) | -1 | 4) | 3 |

4.)\_\_\_\_\_\_\_\_\_

5.) The accompanying graph shows the heart rate, in beats per minute,

of a jogger during a 4-minute interval. What is the range of the jogger's

 heart rate during this interval?

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | [0,4] | 3) | [0,110] |
| 2) | [1,4] | 4) | [60,110] |

5.) \_\_\_\_\_\_\_\_\_

**Short Answer (2) points.**

6.) Solve the inequality for x:

**Short Answer (3) points.**

7.) a) Solve the inequality  algebraically for *x*.

b) Write your answer in interval notation: \_\_\_\_\_\_\_\_\_\_

**Short Answer (5) points.**

8.) Lea just emptied her piggy bank and found that she had $2.85 in nickels and dimes. If the number of nickels is 1 more than twice the number of dimes, how many nickels did she have in her piggy bank? You must show all your work!! (VEWAC)