Unit 4 Review

1. Give an example of each of the following:
	1. Positive Slope
	2. Negative Slope
	3. Zero Slope
	4. Undefined Slope
2. Which of the points lie on the line $y=2x+4?$
	1. (2, 6)
	2. (-2, 0)
	3. (0, 4)
	4. (6, 16)
	5. (-4, -4)
	6. (5, 3)
3. Graph the following equations:
	1. $y=x-3.5$
	2. $y=\frac{1}{3}x+0.25$
	3. $y=-\frac{2}{3}x-3.75$



1. Compare the two tables below in terms of rates of change.

|  |  |
| --- | --- |
| x | y |
|  2 | -6 |
| 4 | -9 |
| 6 | -12 |
| 8 | -15 |

|  |  |
| --- | --- |
| x | y |
| 1 | 4 |
| 2 | 6 |
| 3 | 8 |
| 4 | 10 |

1. Graph the following lines and compare the rates of change:
	1. $y=\frac{1}{3}x+4.5$
	2. $y=2x-3$.2
2. What is the average rate of change for the following coordinates?
	1. (2, 3) (4, 7) (9, 2)
3. A medical student is conducting a study to wresting boys’ weight from age 5 to age 18. The student graphs some data and determines the line is $y=2.38x+75.94$. What does the slope mean in this situation?
4. Compare the rates of change for the following equation and table:

|  |  |
| --- | --- |
| 2 | 3 |
| 5 | 7 |
| 6 | 10 |

$y=\frac{1}{2}x-4$

1. Use the graph below to determine when someone would choose each of the different data plans.
2. Explain the difference between rate of change and average rate of change.