## T3-01 - Discovering Slope

Number $\qquad$ Name $\qquad$ Period $\qquad$
Coleman is a very fast running back on the football team. The coach recorded his times during a play that resulted in a touchdown. The play started on the 10-yard line. The data for Coleman's run are given in the table below.

| $x$ <br> Time (sec) | $y$ <br> Field Position (yd) |
| :---: | :---: |
| 0 | 10 |
| 2 | 26 |
| 6 | 58 |
| 10 | 90 |

1) Plot the data points on the graph. Connect the points with a line.

2) Use the data provided to calculate Coleman's speed during the time intervals given below.
a. 0 to 3 seconds $\qquad$
b. 3 to 5 seconds $\qquad$
c. 5 to 9 seconds $\qquad$
d. 9 Seconds to when he scored a touchdown (100 yards) $\qquad$

Determine the slope of each line:
3)

4)

5)

6)

7) On the grid below, draw a line in RED that has a negative slope, a line in BLUE that has a positive slope, a line in BLACK that has zero slope, and a line in GREEN that has an undefined slope.

8) Give an example of when you would find a positive slope in the real world.
9) Give an example of when you would find a negative slope in the real world.
10) Give an example of when you would find a zero slop in the real world.
11) Give an example of when you would find an undefined slope in the real world.

