Graphing Practice

Procedure:

1. Graph the ***even*** numbered datasets on graph paper. Make sure axes are correct and labeled.

2. Graph the ***odd*** numbered datasets on Excel. Make sure axes are correct and labeled and you print out your graphs to hand in.

3. Either by studying the data points or the shape of the graph, tell me which relationship exists between the variables: linear directly proportional, linear inversely proportional, square (quadratic), inverse square, square root, inverse square root, or a combination.

4. For any *linear relationship*, find the equation of the line. For the drawn examples, use the linear slope equation. For the Excel examples, use the add trendline feature to compute the slope of the graph.

5. For any *non-linear relationship*, attempt to derive the equation of the function either by observation of the datasets in the drawn examples, or by using the add trendline function for non-linear graphs in Excel.

6. Finally, for any non-linear examples, list any asymptotes that exist in the graph. (this might give you some hints to the equation of the function!)

1. (-1,-2) (0,1) (1,4) (3,10)	2. (-9,6) (-5, 4) (-1, 2) (1, 1)	3. (0,2) (1,3) (-3, 11) (.5,2.25) (-2, 6)	4. (4, 1.5) (16, 2) (0, 1) (2, 1.35) (8, 1.7)
5. (1, 5) (-2, 3.5) (-3, 3.22) (4, 3.125) (.5, 11) (-.8, 6.125) (9, 3.02)	6. (0,0) (2, 4) (3, 9) (4, 16) (5, 18) (6, 20) (7, 22)	7. (1, 2) (2, 1.12) (3, .73) (4, .5) (9, 0) (12, -.134)	8. (-3, -12) (-2, 3) (-1, 12) (0, 15) (1, 12) (2, 9) (4, 3)

Created by Jeff Alaimo