Name: _____ **Math 1030 Quiz #1** (July 6$^{\text{th}}$, 2016)

1. Plot the following data and find the **power** trendline:

$x =$	2	5	10	35
$y =$	1	2	4	5

    (a) What is the formula for your trendline? _____

    (b) What is R^2 for this model? _____

    (c) What does your model predict when $x = 50$? _____

2. $y_1 = -x^3 + 3x + 5$ and $y_2 = 3e^{x/2}$.

    (a) Using Goal Seek, find a positive x such that $y_1 = 4$.

        $y_1 = 4$ when $x =$ _____

    (b) Find a point where y_1 and y_2 cross. (There is a solution between $1 \le x \le 3$.)