

Excel Data, Plots and Fits

Make graphs of the following sets of points, and find the 'best-fit' trendlines to see what type of function it is. To do this, try different trendline options (functions) and see which has the highest R^2 value; if R^2 is close to 1, it is a good fit to the data point, and if R^2 is close to 0, then it is not a good fit at all.

1. x _____ y

2.5	5.9
4.8	12.2
10.2	24.8
14.7	35.1

R^2 of Best-fit Linear =
 R^2 of Best-fit Power =
 R^2 of Best-fit Polynomial =
 R^2 of Best-fit Exponential =

Based on the R^2 values, which is the best fit?

Write the best-fit function:

$$y(x) =$$

2. x _____ y

1	9
2	4.5
3	3
6	1.5
9	1

R^2 of Best-fit Linear =
 R^2 of Best-fit Power =
 R^2 of Best-fit Polynomial =
 R^2 of Best-fit Exponential =

Based on the R^2 values, which is the best fit?

Write the best-fit function:

$$y(x) =$$

3. x _____ y

0.52	0.27
1.9	4.1
3.2	9.0
6.4	36.4

R^2 of Best-fit Linear =
 R^2 of Best-fit Power =
 R^2 of Best-fit Polynomial =
 R^2 of Best-fit Exponential =

Based on the R^2 values, which is the best fit?

Write the best-fit function:

$$y(x) =$$

4. x _____ y

1	0
2	4
3	12
4	24
5	40

R^2 of Best-fit Linear =
 R^2 of Best-fit Power =
 R^2 of Best-fit Polynomial =
 R^2 of Best-fit Exponential =

Based on the R^2 values, which is the best fit?

Write the best-fit function:

$$y(x) =$$