

Curve Fitting Worksheet

1. Here is some data about the Fowler's wagon train.

Day	Distance to River (miles)
0	330
4	270
7	235
11	185

Based on this information, how far from the river would you predict that they will be on day 30?

What day will they reach the river, according to your prediction?

What is the equation of your line/ curve of best fit?

2. Here is some information about how much cardboard it takes to make a box.

Height of Box (inches)	Amount of Cardboard (square feet)
6	1.5
11	5
19	15
25	26
32	42

Based on this information, how much cardboard is needed for a box 60 inches high?

What size box could you make with 10 square feet of cardboard?

What is the equation of your line/ curve of best fit?

3. A botanist collected this data from plants she was studying.

Thickness of Leaf (mm)	Weight of Leaf (grams)
.1	.4
1.4	1.4
4.5	2.6
14	4.5

What weight would she predict for a 7 mm thick leaf?

What is the equation of your line/ curve of best fit?

4. The table below shows how much money Bernie has left on a given day in April.

Date	Amount of Money Remaining (\$)
April 1	400
April 3	383
April 10	349
April 17	313

Will he have \$150 left for rent on the 30th?

On what day will he have \$200 left?

What is the equation of your line/ curve of best fit?