MTHSC 102 Section 1.4 – Logistic Functions and Models

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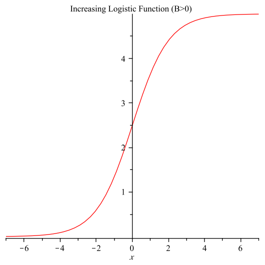
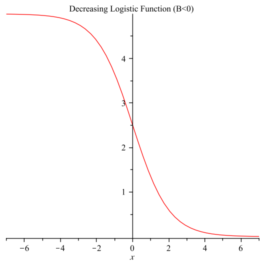
A logistic function has one of the following forms.





Example

The following table shows the number of bacteria present in a biology experiment d days after the beginning of the experiment.

Day	1	2	3	4	5	6	7	8	9
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1. Find a logistic model that fits the data.
2. What is the end behavior of the model as time increases.

Example

Of a group of 200 college men surveyed, the number who were taller than a given number of inches is recorded below.

Inches	64	65	66	67	68	69	70	71	72	73	74	75
Number of Men	200	194	184	166	139	105	70	42	23	12	6	3

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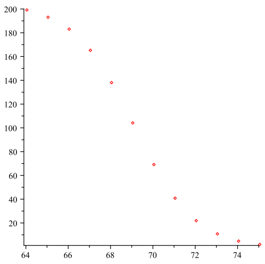

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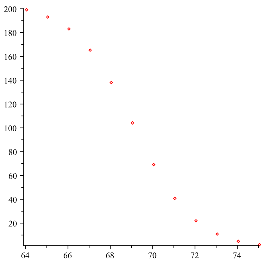

Align the input data by subtracting 65 and give a model for the resulting data.

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