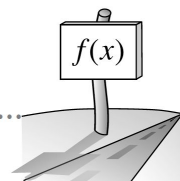


**1.2.1** How can I combine functions?

Composition of Functions



**#62.** A team of effortful engineers at the Worldbot Corporation plans to bring more joy and happiness to the world with a robot called the Generous Botmatic. The Botmatic’s generosity (measured in “gives”) depends on the Worldbot Corporation kindness score. The Worldbot Corporation kindness score depends on the Grand Botmaster’s always increasing wisdom (measured in experiences).

Use the tables to obtain the following values.

Wisdom (exps)	Kindness score	Kindness score	Generosity (gives)
0	0.3	0	9
1	0.6	5	10.8
2	1.2	9.6	12.456
3	2.4	25	18
4	4.8	50	27
5	9.6	153.6	64.296
6	19.2	200	81
7	38.4	307.2	119.592
8	76.8	400	153
9	153.6	600	225
10	307.2	803.2	298.152
11	614.4	1000	369
12	1228.8	1200	441

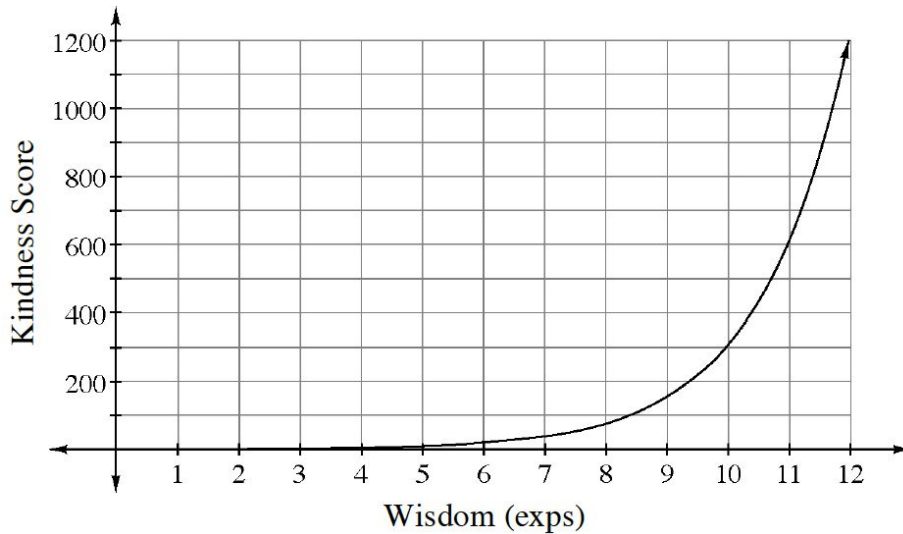
a. The Worldbot Corporation kindness score when the wisdom of the Grand Botmaster is 4 experiences.

b. The generosity of the Botmatic when the Worldbot Corporation kindness score is 200.

c. The generosity of the Botmatic when the wisdom of the Grand Botmaster is 5 experiences.

d. The wisdom of the Grand Botmaster when the generosity of the Botmatic is 119.592 gives.

**#63** What if you were given a graph in the previous problem instead? The graph below represents the kindness score of the Worldbot Corporation based on the wisdom of the Grand Botmaster. Use the graph and the table to estimate the following values.



Kindness score	Generosity (gives)
0	9
5	10.8
9.6	12.456
25	18
50	27
153.6	64.296
200	81
307.2	119.592
400	153
600	225
803.2	298.152
1000	369
1200	441

a. If the wisdom of the Grand Botmaster is 11.75 experiences, what is the generosity of the Botmatic?

b. If the generosity of the Botmatic is 200 gives, what is the wisdom of the Grand Botmaster?