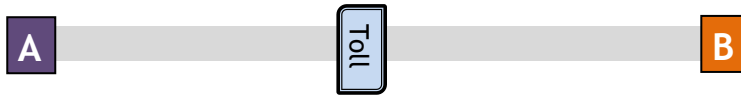


## Toll booth worksheet

Below is a picture of a toll booth on a normal highway. The toll booth has only one job: it must charge the drivers money to get between A and B. We can represent information in a table listed at right. We are interested in how many cars were charged, and how much each car was charged.



	Cars	Amount charged
Entire Road	400	\$1.50
Toll Booth	400	\$1.50

We can make this more complicated with more tollbooths. Notice that when the toll booths are arranged in this pattern, they have to work together to charge the total of \$1.50. (this is a different road from earlier)



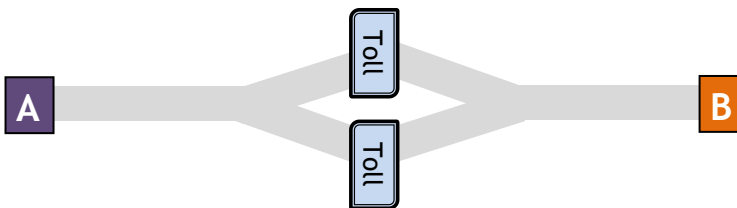
	Cars	Amount charged
Entire Road	300	\$2.50
Toll Booth 1	300	\$1.00
Toll Booth 2	300	\$1.50

Using information from the table at right, fill in the missing data for this toll booth arrangement.



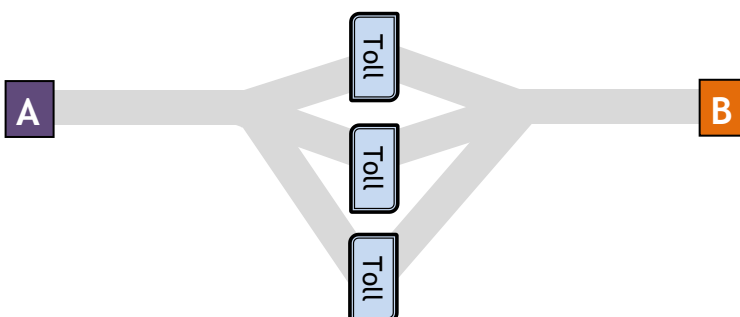
	Cars	Amount charged
Entire Road		\$1.00
Toll Booth 1	400	\$
Toll Booth 2		\$0.50
Toll Booth 3		\$0.25

Here is a different arrangement to solve. Think very carefully about this one. The top booth is #1.



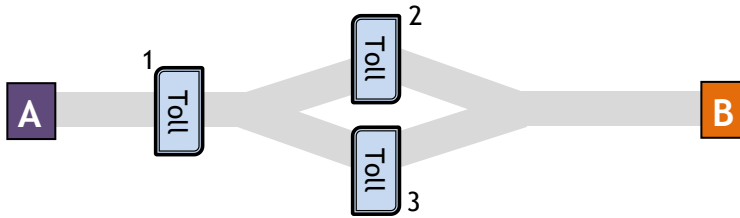
	Cars	Amount charged
Entire Road	600	\$2.50
Toll Booth 1	350	\$
Toll Booth 2		\$

One more arrangement to solve. The top toll booth is #1. Fill in the missing information.



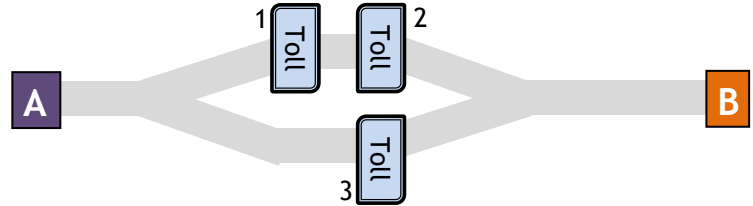
	Cars	Amount charged
Entire Road		\$
Toll Booth 1	400	\$
Toll Booth 2	375	\$2.00
Toll Booth 3	50	\$

Our road planners have gotten a little out of control. Try to work through the solutions to the following roads.

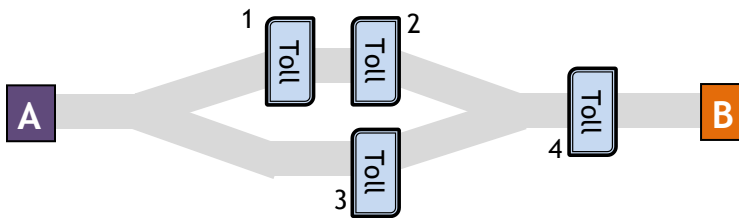


	Cars	Amount charged
Entire Road	800	\$
Toll Booth 1		\$0.75
Toll Booth 2		\$
Toll Booth 3	375	\$1.00

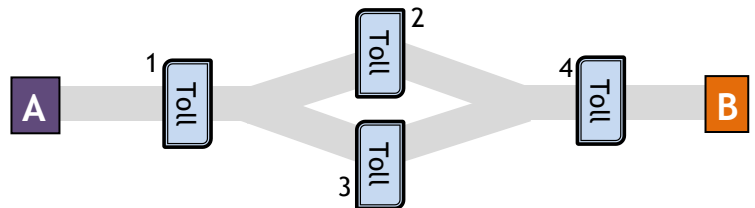
	Cars	Amount charged
Entire Road	600	\$
Toll Booth 1		\$
Toll Booth 2	200	\$1.00
Toll Booth 3		\$1.50



	Cars	Amount charged
Entire Road		\$5.00
Toll Booth 1		\$1.00
Toll Booth 2		\$0.50
Toll Booth 3	250	\$
Toll Booth 4	350	\$



	Cars	Amount charged
Entire Road		\$4.00
Toll Booth 1	400	\$0.50
Toll Booth 2	100	\$2.00
Toll Booth 3		\$
Toll Booth 4		\$



	Cars	Amount charged
Entire Road	800	\$6.00
Toll Booth 1	200	\$
Toll Booth 2		\$2.00
Toll Booth 3		\$1.00
Toll Booth 4		\$
Toll Booth 5	100	\$

