

Consider the following graph, which represents the one-way airfare between five cities.

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>A</b>	*	\$220	\$240	\$290	\$430
<b>B</b>	\$220	*	\$260	\$320	\$360
<b>C</b>	\$240	\$260	*	\$180	\$300
<b>D</b>	\$290	\$320	\$180	*	\$250
<b>E</b>	\$430	\$360	\$300	\$250	*

- First use a graph tool like [Graph Creator](#) to represent the information in the table. Use vertices to represent the cities and weights on appropriate edges to show the airfares.
- Next, assume that you are a salesman who lives in one of the cities (pick any city except for A) and required to fly to **all four** of the other cities and return to your home city. Describe how you would use the Nearest Neighbor Method to determine the optimal route. What is the total cost for this Hamilton circuit?

