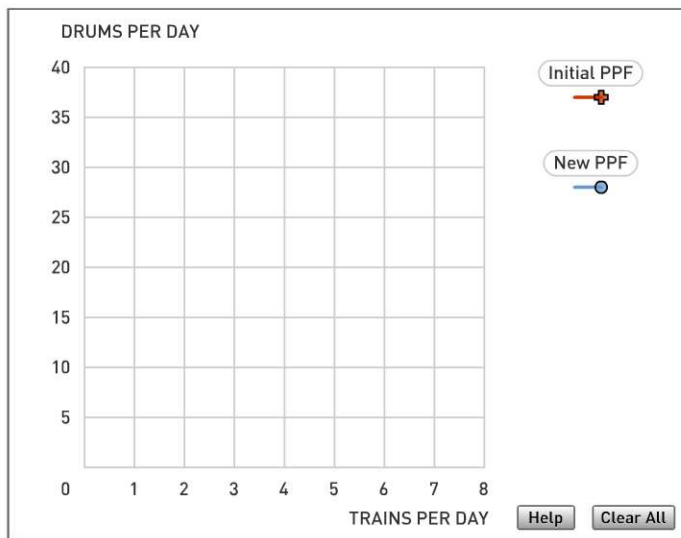


2. The production possibility frontier and opportunity cost

Nathan is a skilled toy maker who is able to produce both trains and drums. He has eight hours a day to produce toys. The following table shows the daily output resulting from various possible combinations of his time.

Choice	Hours per Day Producing Trains	Hours per Day Producing Drums	Trains Produced per Day	Drums Produced per Day
A	8	0	4	0
B	6	2	3	11
C	4	4	2	18
D	2	6	1	20
E	0	8	0	21

On the following graph, use the red points (cross symbol) to plot Nathan's initial production possibilities frontier (PPF). Plot your points in order, either from left to right or right to left. Line segments will connect the points automatically.



Suppose Nathan is currently using combination D, producing 1 train per day. What is his opportunity cost of producing a second train per day?

Now suppose Nathan is currently using combination C, producing 2 trains per day. What is his opportunity cost of producing a third train per day?

As Nathan increases his production of trains, his opportunity cost of producing one more train _____ .

Suppose Nathan buys a new tool that allows him to produce twice as many trains per hour but doesn't affect his ability to produce drums. Use the blue points (circle symbol) to plot his new PPF on the previous graph. Because he can now make more trains per hour, Nathan's opportunity cost of producing drums is _____ it was previously.