**4. Opportunity cost and production possibilities**

Janet is a skilled toy maker who is able to produce both cars and balls. She has 8 hours a day to produce toys. The following table shows the daily output resulting from various possible combinations of her time.

| **Choice** | **Hours Producing** | | **Produced** | |
| --- | --- | --- | --- | --- |
| ***(Cars)*** | ***(Balls)*** | ***(Cars)*** | ***(Balls)*** |
| **A** | 8 | 0 | 4 | 0 |
| **B** | 6 | 2 | 3 | 11 |
| **C** | 4 | 4 | 2 | 16 |
| **D** | 2 | 6 | 1 | 19 |
| **E** | 0 | 8 | 0 | 20 |

*On the following graph, use the blue points (circle symbol) to plot Janet's initial production possibilities frontier (PPF).*

CHART

1. Suppose Janet is currently using combination D, producing one car per day. Her opportunity cost of producing a second car per day isper day.

1 ball, 3 balls, 16 balls, OR 19 balls.

2. Now, suppose Janet is currently using combination C, producing two cars per day. Her opportunity cost of producing a third car per day isper day.

1 ball, 5 balls, 11 balls, OR 16 balls.

3. From the previous analysis, you can determine that as Janet increases her production of cars, her opportunity cost of producing one more car.

Increase, Decrease OR Remain the same

*4. Suppose Janet buys a new tool that allows her to produce twice as many cars per hour as before, but it doesn't affect her ability to produce balls. Use the green points (triangle symbol) to plot her new PPF on the previous graph.*

Because she can now make more cars per hour, Janet's opportunity cost of producing balls isit was previously.

Higher than, Lower than, OR The same as