You are on a remote island all alone and you can only do two things. You either spend time fishing or picking coconuts. You sleep 8 hours every night and spend remaining time at work.

1. Estimate your productivity. In particular, if you spend all 16 hours catching fish, how many can you get? If you spend all 16 hours picking coconuts, how many can you get? There are only up to 30 fish and up to 30 coconuts available. You can not exceed these numbers. Fill your estimates in the table below.

|  | Fish | Coconuts |
| :--- | :--- | :--- |
| You |  |  |

2. Sketch your production possibility frontier (PPF) below. Start with number of fish on horizontal axis and number of coconuts on vertical axis. Connect these two points with a straight line.

3. Choose the optimal point of your consumption (any point on the PPF, choose whatever you like) and depict this point on the graph above.
4. Fill in the table below.
$\left.\begin{array}{|c|c|c|c|c|}\hline \text { Production of } \\ \text { Fish }\end{array} \begin{array}{c}\text { Consumption of } \\ \text { Fish }\end{array} \quad \begin{array}{c}\text { Production of } \\ \text { Coconuts }\end{array} \quad \begin{array}{c}\text { Consumption of } \\ \text { Coconuts }\end{array}\right]$
5. Opportunity costs. Fill in the table below. Note that opportunity cost of fish (good on horizontal axis) is negative of the slope of your PPF and opportunity cost of coconut (good on vertical axis) is $1 / \mathrm{OC}$ of fish.

|  | Fish | Coconuts | OC of fish | OC of coconut |
| :--- | :--- | :--- | :--- | :--- |
| You |  |  |  |  |

6. Cooperate with your partner and fill in the table below.

|  | Fish | Coconuts | OC of fish | OC of coconut |
| :---: | :---: | :---: | :---: | :---: |
| You |  |  |  |  |
| Your Partner |  |  |  |  |

7. Who has lower opportunity cost of fish? How about coconuts?

Lower opportunity cost of fish $\qquad$
Lower opportunity cost of coconuts $\qquad$
8. Who has absolute and comparative advantage in what? Absolute advantage - comparing absolute quantities of production, the more the better. Comparative advantage - comparing opportunity costs of production, the less the better.

Absolute advantage in fish production $\qquad$
Absolute advantage in coconuts production $\qquad$
Comparative advantage in fish production $\qquad$
Comparative advantage in coconuts production $\qquad$
You will specialize in production of $\qquad$
Your partner will specialize in production of $\qquad$
9. Decide with your partner what will the exchange rate between fish and coconuts be. You have to have the same numbers below.
one fish will be worth $\qquad$ coconuts
one coconut will be worth $\qquad$ fish
10. How many units of good that you produce will you keep and how many units will you exchange for the other good? Use exchange rate from part 9 to answer this question.

You produce $\qquad$ units of $\qquad$ (good that you specialize in). You will keep
$\qquad$ units of this good and you will exchange remaining $\qquad$ units for $\qquad$ units of the other good.
11. Fill in the table below.

| Without trade With trade |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|   Production Consumption Production Consumption Gains <br> You Fish      <br>  Coconut      <br> Your Fish      <br> partner Coconut      |  |  |  |  |  |  |  |

12. Draw your and your partner's PPF and trading line below. Use exchange rate from part 9 to determine the slope of the trading line. Depict your consumption without and with trade.

