1. Using the following table, answer questions

| Output per <br> hour | Cooking | Washing <br> dishes |
| :---: | :---: | :---: |
| Corta | $\$ 8$ | $\$ 14$ |
| Mary | $\$ 10$ | $\$ 12$ |

a) i) State whether the following statement is True, False, or uncertain:

Given the information in the table, an efficient division of labour would have Corta and Mary alternate (take turns) cooking dinner and washing up.
ii) Explain your answer to i).
iii) Draw a production possibility frontier (ppf) for 2 hours for Corta and Mary, where they specialize in the activity in which each has a comparative advantage. The horizontal axis should be output from cooking.
iv) Draw a production possibility frontier (ppf) for 2 hours for Corta and Mary, where they specialize in the activity in which each has a comparative DISadvantage.
v) Compare the two ppfs and discuss how the choice of specialization affects the amounts they can consume.
b) Explain how the assumption of constant marginal product of labour affects the answer to a).
c)
2. Jaimie and Ashley are planning on spending 6 hours each this weekend on household tasks.

They need to pull some weed) and clean the house. Below is their output per hour.

|  | \# of weeds pulled per hour | Meters of house cleaned |
| :---: | :---: | :---: |
| Ashley | 400 | 10 |
| Jaimie | 300 | 8 |

a) Who has an absolute advantage in pulling weeds?
b) Who has an absolute advantage in cleaning the house?
c) Who has a comparative advantage in pulling weeds?
d) Who has a comparative advantage in house?
e) Draw their joint production possibility frontier, with \# of weeds pulled on the vertical axis (y-axis) and meters of house cleaned on the horizontal axis.
f) If they choose to pull 1000 weeds and spend the rest of their efforts washing floors, will either Jaimie or Ashley specialize?
i) If yes, on which activity?
ii) Draw an indifference curve to represent this choice. Hint. For this point and the next, you need to figure out how many hours each will spend on each activity.
iii) How many meters of the house will be cleaned if they pull 1000 weeds?

Ashley and Jaimie have a helpful neighbour who hates weeds. This neighbour will pull 300 weeds per day. The neighbour will not help inside the house.
g) Draw a ppf for Ashley and Jaimie including the free help from the neighbour.
i) How is this neighbour's help likely to affect the number of weeds pulled by Ashley and Jaimie (will they likely choose to have more or less than 1000 weeds pulled)?
ii) Are Ashley and Jaimie likely to change the meters of house cleaned this weekend?

## 3. Paying for services:

Identify which of the following would be a payments based on opportunity costs of inputs, opportunity cost of output or replacement cost of output. Also, calculate or identify the value of the service.
a) Jamie is considering hiring someone to clean the house. Jamie earns $\$ 20 /$ hour at work. Jamie chooses to do the housecleaning, purchasing a cleaning supplies for \$2/hour.

1. The value of Jamie's housecleaning is measured using the method called
2. Value of Jamie's time is $\qquad$ .
3. The value of the housecleaning is $\qquad$ .
(You might need to answer 3 before 2, but then again, maybe not).
b) Max can buy coffee for $\$ 3.00$. If Max makes the coffee at home, the supplies cost $\$ 0.50$. By making it at home, therefore, Max figures there is a $\$ 2.50$ saving. Max measures the cost of coffee using the method of $\qquad$ . The value Max places on their own time using this "figuring" is $\qquad$ _.
4. In each case, indicate who is likely to get the higher compensation: (write 'more' or 'less' than Implications of market valuation and non-market valuation means that, if a natural disaster ended their lives, compensation paid for:
a. a 25 year-old daycare worker would receive $\qquad$ compensation than that paid for a 40 year old stay-at-home mother.
b. a 30 year-old daycare worker would be $\qquad$ than compensation paid for a 42 year old bank manager.
5. Consider Jake and Al. They are considering going to Portugal or Sweden once the pandemic ends. Here are their payoffs:

|  | Al's choices: |  |
| :--- | :--- | :--- |
| Jake's choices | Sweden | Portugal |
| Sweden | $(10,5)$ | $(3,6)$ |
| Portugal | $(3,6)$ | $(4,9)$ |

a) The strategy ( $\mathrm{S}, \mathrm{P}$ ), represents Jake going to $\qquad$ and Al going to $\qquad$ .
a. It has payoff $\qquad$ for Jake and $\qquad$ for Al.
b) Is there a dominant strategy in this game? Explain.
c) Find the Nash equilibrium (equilibria) in this game, if one or more exists. If there is no Nash equilibrium, then explain why not. What is/are the payoffs in these Nash equilibria (this equilibrium).
d) $\mathrm{T} / \mathrm{F} /$ Uncertain. Both Jake and Al enjoy going on holidays together more than going on separate vacations.

