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Your TA's LAST name:
SUNY-Binghamton Economics 160, Principles of Microeconomics, Christopher Hanes

## Problem set 1: PPF

1) There are 100 nennle in a village. Thev can nroduce onlv two things: haircuts. and watches. Each person can provide 5 hours of labor. With one hour of labor, a person can make one watch, or give two haircuts.
a) What is the opportunity cost of making a watch? $\qquad$
b) What is the opportunity cost of giving a haircut? $\qquad$
c) On the graph, draw the PPF for the village.

d) Someone in the village discovers a faster way to make watches. Now, with one hour of labor, a person can make two watches.
a) What is the new opportunity cost of making a watch?
b) What is the new opportunity cost of giving a haircut?
c) On the graph, draw the new PPF for the village with a dashed line, and the old PPF with a solid line..

2) In another village, there are also 100 people who can produce only haircuts and watches. Again, each person in the village can provide 5 hours of labor. But in this village there are two types of people: barbers
and watchmakers. With one hour of labor, a barber can make one watch, or give two haircuts. With one hour of labor, a watchmaker can make two watches, or give one haircut. There are 50 barbers and 50 watchmakers.
a) How many haircuts can the villagers give if everyone gives haircuts (no one makes watches)?
b) How many watches can the villagers give if everyone makes watches (no one gives haircuts)?
c) How many haircuts and watches will be created if all of the barbers give haircuts, and all of the watchmakers make watches?
$\qquad$ haircuts $\qquad$ watches
d) On the graph, draw the PPF for the village.

