## AS/ECON 4070 3.0AF Midterm Exam Wednesday October 252006

$$
\text { time }=50 \text { minutes }
$$

Do all 3 questions. All questions count equally.

1. What would be the incidence of a $\$ 7$ per unit excise tax on a product which is provided in a perfectly competitive market, for which the demand curve has the equation

$$
Q^{D}=120-5 P^{D}
$$

and for which the supply curve had the equation

$$
Q_{s}=2 p_{s}-20
$$

where $P^{D}$ is the price paid by demanders, $p_{s}$ is the price received by suppliers, $Q^{D}$ is the quantity demanded and $Q_{s}$ is the quantity supplied?
2. What would be the incidence of a tax levied on all revenue earned by firms in the service sector in Canada? State as precisely as possible the assumptions that you are making.

## continued over

3. The picture above shows the effects of a $\$ 1$ tax on clothing, when the price of food is $\$ 1$, and when the net-of-tax price of clothing is $\$ 1$. Point $A$, at $(900,900)$ is the consumption bundle which the person would choose if there were no tax. Point $B$ at $(1600,400)$ is on the same indifference curve as $A$, but is located where the slope of the indifference curve is $-1 / 2$.

State, as precisely as possible : (a) the person's compensated elasticity of demand for clothing ; (b) the compensating variation to the tax ; (c) the revenue the tax would collect if the person were compensated for the damage done by the tax; (d) the excess burden of the tax.
end

