A simple Pigovian pollution tax

This is a modified version of our Danish Dynamite in-class exercise from Session 2.

P(x)	Q^d(x)	Q$_{sprivate}$(x)	Q$_{ssocial}$(x)
$30	0	240	160
$28	20	220	140
$26	40	200	120
$24	60	180	100
$22	**80**	160	**80**
$20	100	140	60
$18	**120**	**120**	40
$16	140	100	20
$14	160	80	0
$12	180	60	0
$10	200	40	0
$8	220	20	0
$6	240	0	0

Problems

Suppose that the external cost of perc pollution caused by Danish Dynamite's dry-cleaning is $**8** per clothing item. Given that,

1. Graph the demand curve and both supply curves.
2. Indicate the area on the graph that corresponds to the welfare loss associated with the external losses due to perc pollution.
3. Suppose the state of Queensland were to impose a **Pigovian pollution tax** of $**8** per clothing item on the dry-cleaning industry. What effect would that have on welfare loss due to perc pollution?