

**Solutions**

Just for a point of reference, at  $P^*$  and  $Q^*$  (the undistorted equilibrium)

$$CS = A + B + C$$

$$PS = D + E + F$$

$$GFT = A + B + C + D + E + F$$

- 1A. CS = A. Worse off. Consumers have lost B + C.
- 1B. PS = B + D + F. Better off (as drawn) because producers gain B and lose E. B is bigger.
- 1C. DWL = C + E. Society is worse off. There is a DWL. GFT are now only A + B + D + F.
  
- 2A. B. Consumers lose B, but producers gain it. It has been transferred from consumers to producers.
- 2B. C. Consumers lose C, as they no longer consume the units between  $Q_1$  and  $Q^*$ .
- 2C. E. Producers lose E, as they no longer produce the units between  $Q_1$  and  $Q^*$ .

Again, for a point of reference, at  $P^*$  and  $Q^*$  (the undistorted equilibrium)

$$CS = A + B + C$$

$$PS = D + E + F$$

$$GFT = A + B + C + D + E + F$$

- 3A. CS = A + B + D. Better off (as drawn) because consumers gain D and lose C. D is bigger.
- 3B. PS = F. Worse off. Producers have lost D + E.
- 3C. DWL = C + E. Society is worse off. There is a DWL. GFT are now only A + B + D + F.
  
- 4A. D. Consumers gain D, producers lose it. It has been transferred from producers to consumers.
- 4B. C. Again, consumers lose C, as they no longer consumer the units between  $Q_1$  and  $Q^*$ .
- 4C. E. Again, producers lose E, as they no longer produce the units between  $Q_1$  and  $Q^*$ .
  
- 5.  $MV > MC$ . More production, more trades, produce until we get to  $Q^*$ . The value of consuming the good (MV) is higher than the cost of producing the good (MC). There are unexploited GFT. There are mutually beneficial exchanges that could take place between demanders and suppliers. More units should be produced (and consumed).
  
- 6.  $MV < MC$ . Less production, fewer trades. Cut back production to  $Q^*$ . The value of consuming the good is lower than the cost of producing the good. We are spending \$8 to produce something that is worth \$6. We have produced too many and should cut back production.

- 1. B
- 2. G
- 3. D
- 4. C
- 5. H
- 6. A
- 7. F
- 8. E

The area under any “marginal curve” gives you the total. Thus, the area under the MC curve from  $Q_1$  to  $Q_2$ , for instance, gives us the total cost of producing the units between  $Q_1$  and  $Q_2$ .