

ECO 1104 C Midterm 2

Answer Key

Multiple Choice

1) C

8) B

2) A

9) A

3) B

10) D

4) C

5) B

6) A

7) C

1.5
marks
each

15 points
total

Short Answers

15

1)

3

[One example of elastic labour is older workers close to retirement.] [If these people have enough assets saved to retire, they may not truly need to work.] [Having a tax on labour lowers the benefit from working] and so some of these workers may choose to retire or work less if they feel the after-tax wage is not worth it.

1 point for the stated scenario

1 point for a description of why

1 point for some discussion that a tax lowers the benefit from working

Other good answers (these are paraphrased)

- workers who have a main job and a part-time job on the side: easy to cut hours at the second job
- professionals who own their own business
- students working part time
- parents with young children - considering one parent to stay home.

Short Answer

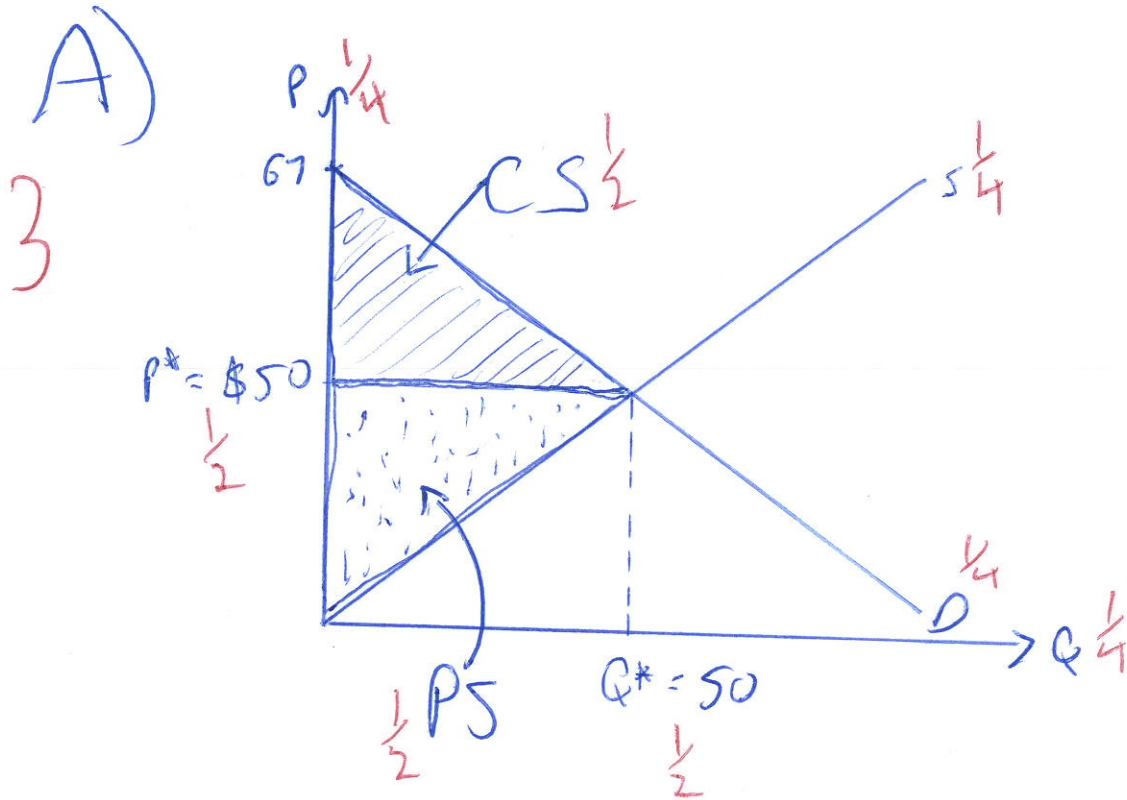
- 2) A) [the efficient ¹/₂ outcome is that Dave gets to play his music], as ¹/₂ it benefits him more than it costs Bob. [An efficient allocation could be reached through private bargaining.] [As Bob has the property right, Dave will have to ¹ compensate Bob.] [This ~~compensation~~ compensation ¹ will be between 500 to 400 dollars.]
- B) [The allocation will not be reached due to this ¹ additional cost.] [Dave must compensate Bob at least \$400, and ~~if the total cost~~ pay the lawyer \$200. This \$600 total cost is more than Dave's benefit of \$500.]

Short Answer

6 3) [Rent control is ¹ an example of a price ceiling.] [In the short run, lower rents will cause ¹ some people to want to rent housing,] [but it will also cause some marginal housing ¹ units, such as basement suites or in-law suits, to be pulled from the market.]

[I would expect the shortage to increase in the long ¹ run,] [because elasticity increases in the long ¹ run.] [In the long run, low rents will cause rental units ¹ to fall into disrepair, and developers will not develop new rental housing, as they do not have a price incentive to do so. This will cause the housing rental supply to fall.]

Long Answer 18



B)

3

$$CS = (67 - 50) \times 50 \times \frac{1}{2} = 425$$
$$PS = 50 \times 50 \times \frac{1}{2} = 1250$$
$$TS = PS + CS = 1250 + 425 = 1675$$

or

$$TS = 67 \times 50 \times \frac{1}{2} = 1675$$

$\frac{1}{2}$ point for each answer

$\frac{1}{2}$ point for setting each one up.
(Formula or numbers are fine)

C) $Q_d = Q_s = 42.75$

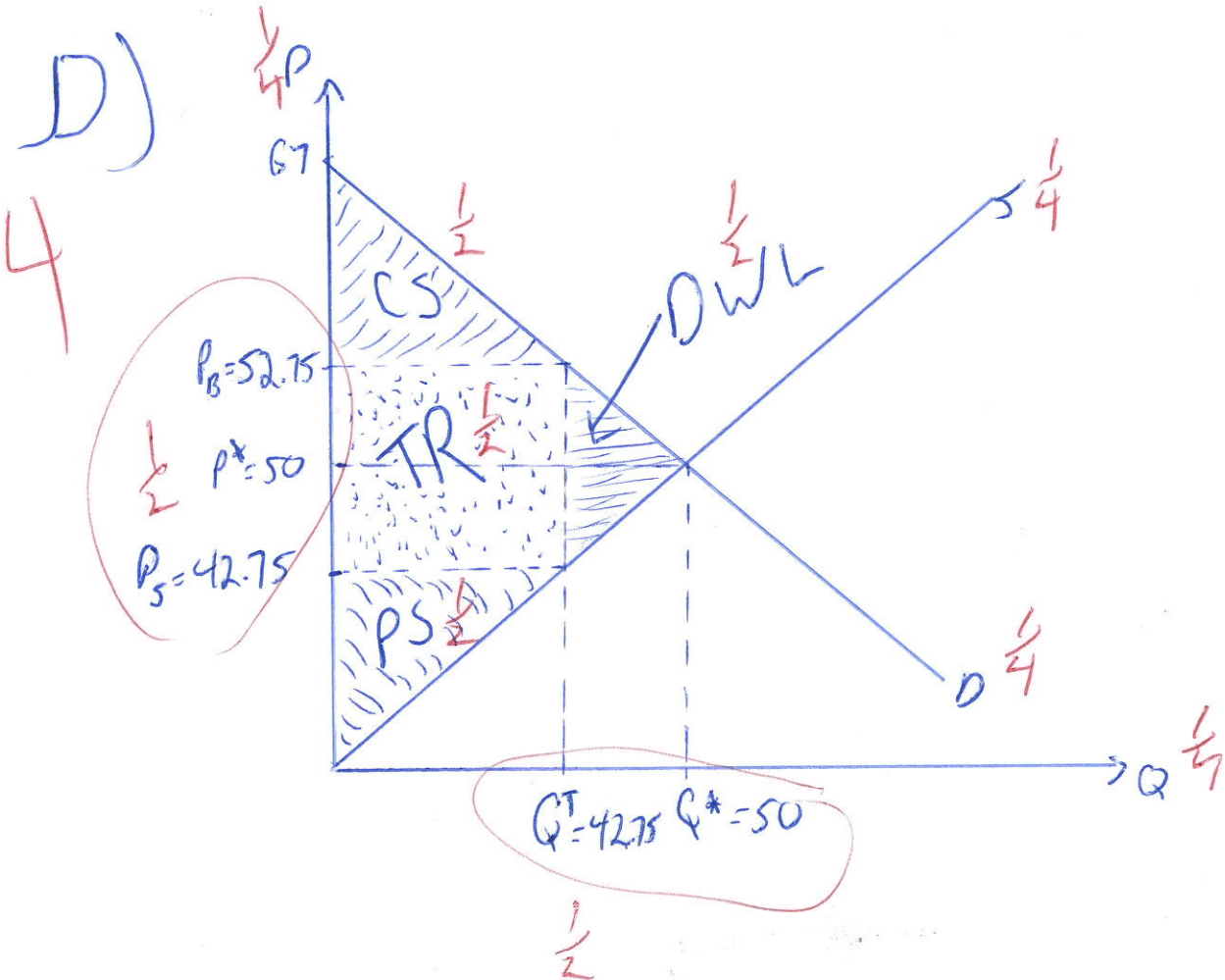
2 Plug into Demand to get P_B
 Plug into Supply to get P_S

~~2~~ $P_B = 67 - \frac{1}{3}Q = 67 - \frac{1}{3}(42.75)$

$P_B = 52.75$

$P_S = Q = 42.75$

1 point each



$$E) CS^T = (67 - 52.75) \times 42.75 \times \frac{1}{2} = 304.6$$

$$PS^T = 42.75 \times 42.75 \times \frac{1}{2} = 913.8$$

$$TR^T = (52.75 - 42.75) \times 42.75 = 427.5$$

or

$$10 \times 42.75 = 427.5$$

~~TS~~

$$TS^T = CS + PS + TR = 304.6 + 913.8 + 427.5$$

$$= 1645.9 \frac{1}{2}$$

$$DWL = TS - TS^T$$

$$= 1675 - 1645.9 = 29.1 \frac{1}{4}$$

or

$$DWL = 10 \times (50 - 42.75) \times \frac{1}{2} \\ = 36.25 *$$

Note: The two methods for DWL give different answers - This is entirely due to rounding the intercept in the Demand function from 66.666... to 67. We will discuss in class.

F)

[Because of the tax, buyers have to pay \$2.75 more, and sellers receive \$7.25 less.

2

Most of the tax [↓] has been absorbed by restaurant owners having to lower their prices, even though the tax was intended for restaurant customers.) [The government's attempt to tax the rich was [↓] not effective.] ~~+~~

Bonus 2 point each

In the Economics ~~to~~ video, it was shown that the US government makes more money per barrel of oil than the oil company does.

In the movie clip we watched in class, it was the group discussing their strategy for picking up girls that sparked John Nash's major breakthrough in game theory.