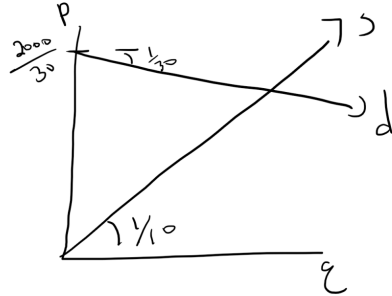
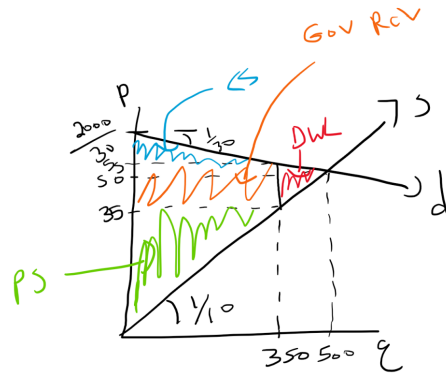


1.



- A.
- B. $p = 50, q = 500$
- C. $p = 55$



- D.
- E. 1500

2.

- A. Constant mp_1 , Constant RTS
- B. Decreasing mp_1 , Decreasing RTS
- C. Decreasing mp_1 , Increasing RTS

3.

A. $-\frac{\frac{\partial(3x_1+2x_2)}{\partial x_1}}{\frac{\partial(3x_1+2x_2)}{\partial x_2}} = -\frac{3}{2}$

B. $-\frac{\frac{\partial\left((3x_1+2x_2)^{\frac{1}{3}}\right)}{\partial x_1}}{\frac{\partial\left((3x_1+2x_2)^{\frac{1}{3}}\right)}{\partial x_2}} = -\frac{3}{2}$

C. $-\frac{\frac{\partial\left(x_1^{\frac{1}{2}}x_2^{\frac{2}{3}}\right)}{\partial x_1}}{\frac{\partial\left(x_1^{\frac{1}{2}}x_2^{\frac{2}{3}}\right)}{\partial x_2}} = -\frac{3x_2}{4x_1}$

4.

- A. $\pi(y) = 4y - 2\frac{y^2}{4} - 4$
- B. $y = 4, x_1 = 4$

- C. 4
- D. $x_1 = 2\sqrt{2}, x_2 = 4\sqrt{2}$
- 5.
 - A. $-\frac{x_2}{x_1}$
 - B. $-\frac{x_2}{x_1} = -1$
 - C. $x_1 = y^2, x_2 = y^2$
 - D. $2y^2$
 - E. $40y - 2y^2$
 - F. $y = 10, \pi = 200$