

$$17. \begin{array}{l} A \quad 4x + 3y + 5z = 10 \\ B \quad 5x + 2y + 10z = 13 \\ C \quad 3x + y - 2z = -9 \end{array}$$

$$\begin{array}{r} B \quad 5x + 2y + 10z = 13 \\ -2 \cdot C \quad -6x - 2y + 4z = 18 \\ \hline D \quad -x \quad + 14z = 31 \end{array}$$

$$\begin{array}{r} A \quad 4x + 3y + 5z = 10 \\ -3 \cdot C \quad -9x - 3y + 6z = 27 \\ \hline E \quad -5x \quad + 11z = 37 \end{array}$$

$$\begin{array}{r} -5 D \quad 5x - 70z = -155 \\ E \quad -5x + 11z = 37 \\ \hline \quad \quad -59z = 118 \\ \quad \quad \quad \overline{-59} \quad \overline{-59} \\ \quad \quad \quad z = 2 \end{array}$$

$$\begin{array}{l} -x + 14z = 31 \\ -x + 14(2) = 31 \\ -x + 28 = 31 \end{array}$$

$$\begin{array}{l} -x = 3 \\ x = -3 \end{array}$$

$$\begin{array}{l} y = 4 \\ (-3, 4, 2) \end{array}$$

4.5

 $x = \text{TV}$

41.

 $y = \text{Newspaper}$

Constraints

Cost ① $100,000x + 20,000y \leq 1,000,000$

Budget $100,000x \leq .80(1,000,000)$

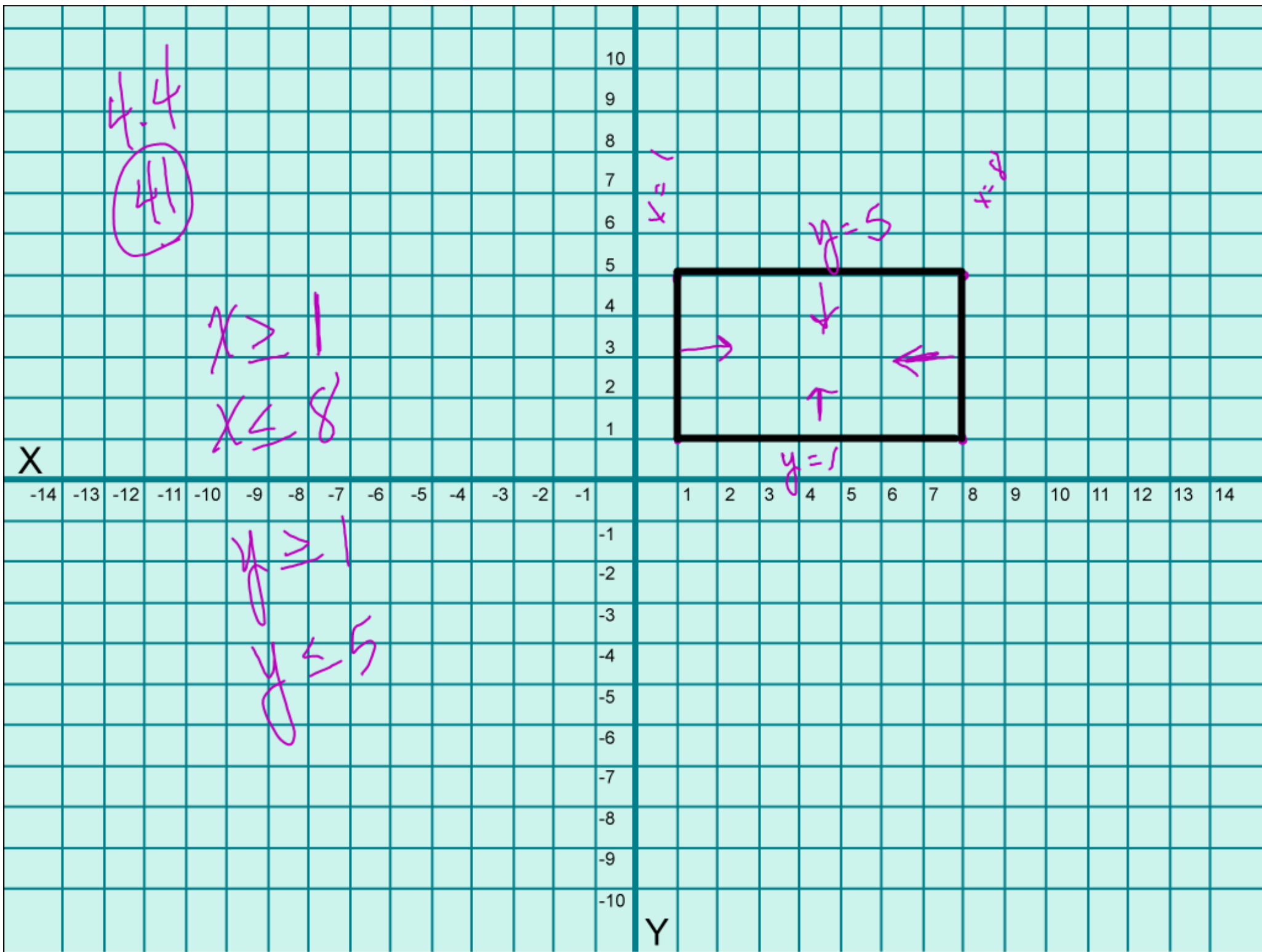
② $100,000x \leq 800,000$

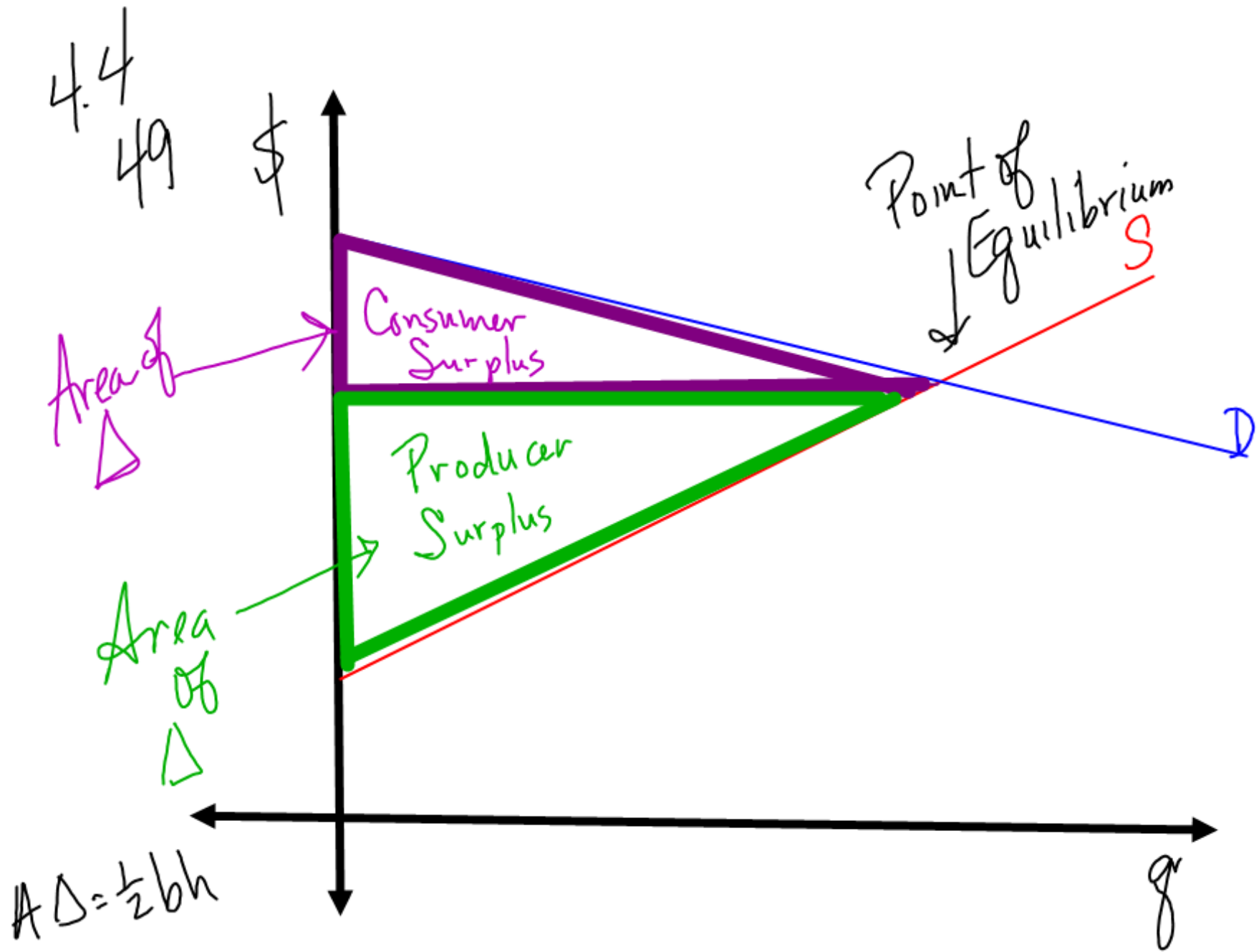
③ $x \geq 0$

④ $y \geq 0$

Maximize Objective Function

Viewers $V = 20x + 5y$ in millions



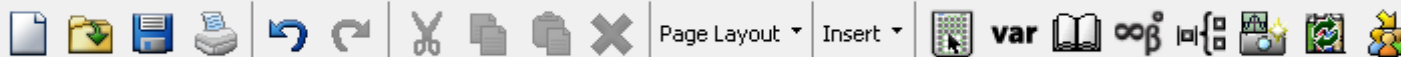


$$49. \quad p = 56 - .0001x$$

$$p = 22 + .00001x$$

 y_1 y_2

Find point of intersection



Problem 1

