2 consumers

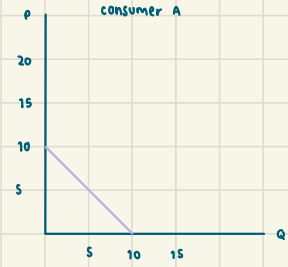
A : $Q_A = 10 - P$ $\quad P = 10 - Q_A$

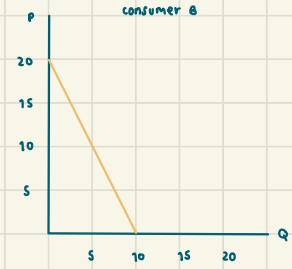
B : $Q_B = 10 - \frac{1}{2}P$ $\quad P = 20 - 2Q$

1 seller

$Q = P$

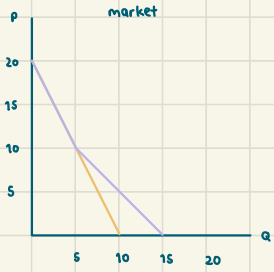
1. draw diagram




$= 10 - P + 10 - \frac{1}{2}P$

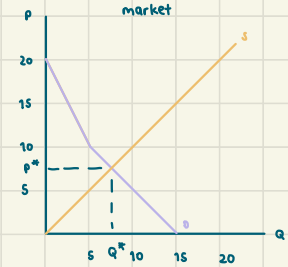
$= 20 - \frac{3}{2}P$




$$Q^d_{market} = \begin{cases} 10 - \frac{1}{2}P & P \geq 10 \\ 20 - \frac{3}{2}P & P < 10 \end{cases}$$

2. find equilibrium

- how many people are buying




at the equilibrium $P^*$ and $Q^*$

there are 2 buyers and 1 seller