

MGT 104

Microeconomics

Supply

Supply refers to the quantity of a good or service that producers are willing and able to sell at various prices during a specific period.

It shows the relationship between price and quantity supplied.

The higher the price, the greater the quantity supplied-ceteris paribus (other things remaining constant).

Law of Supply

- ✓ The law of supply states that, other things being equal, the quantity supplied of a good rises when the price of the good rises.
- ✓ This relationship is direct or positive.
- ✓ Mathematically, it can be expressed as: $Q_s = f(P)$
- ✓ Example: As the price of rice increases, farmers are more willing to supply more rice.

Supply Curve

- A supply curve is a graphical representation of the relationship between price and quantity supplied.
- It slopes upward from left to right, showing a positive relationship.
- Movement along the curve occurs due to change in price.
- Shift of the supply curve occurs due to non-price factors like technology, input cost, etc.

Determinants of Supply

- ✓ Price of the commodity
- ✓ Price of related goods
- ✓ Cost of production
- ✓ Technology
- ✓ Government policies
- ✓ Natural factors
- ✓ Future expectations
- ✓ Number of sellers

Elasticity of Supply

Elasticity of supply measures the responsiveness of quantity supplied to changes in price.

Formula: $E_s = (\% \text{ Change in Quantity Supplied}) / (\% \text{ Change in Price})$

Types of elasticity:

- ☐ Perfectly Elastic
- ☐ Perfectly Inelastic
- ☐ Relatively Elastic
- ☐ Relatively Inelastic
- ☐ Unitary Elastic

Exceptional Supply Curve

- ✓ In some cases, the law of supply does not hold true.
- ✓ The supply curve may slope backward or downward.

Causes:

- Limited stock (e.g., rare goods)
- Agricultural goods with natural constraints
- Labor supply beyond a certain wage level decreases (backward bending supply curve)

Example: Artists' rare paintings, antique goods, or labor at high wage levels.

Price Elasticity of Supply

Price-Supply Elasticity



e_s

MEASURE OF DEGREE OF

RESPONSIVENESS OF QS

TO CHANGE IN THE PRICE OF COMMODITY.

(TYPES) of EL. of SUPPLY

KINDS

①

P	$Q.S$
20	200
20	300

$es =$

(TYPES) of EL. of SUPPLY

KINDS

①

P	Q.S
20	200
20	300

$\% \Delta Q.S$

$\% \Delta P$

①

$$es = \frac{\% \Delta Q_S}{\% \Delta P}$$

②

$$\% \Delta P = \frac{\Delta P}{P} \times 100 = \frac{0}{20} \times 100 = 0$$

③

$$\% \Delta Q_S = \frac{\Delta Q}{Q} \times 100 = \frac{100}{200} \times 100 = 50\%$$

(TYPES) of EL. of SUPPLY

KINDS

①

P	Q.S
20	200
20	300

$$e_s = \frac{\% \Delta Q_s}{\% \Delta P}$$

$$= \frac{50}{0}$$

$$e_s = \infty$$

(TYPES) of EL. of SUPPLY

KINDS

(1)

PERFECTLY ELASTIC S

P	Q.S
20	200
20	300

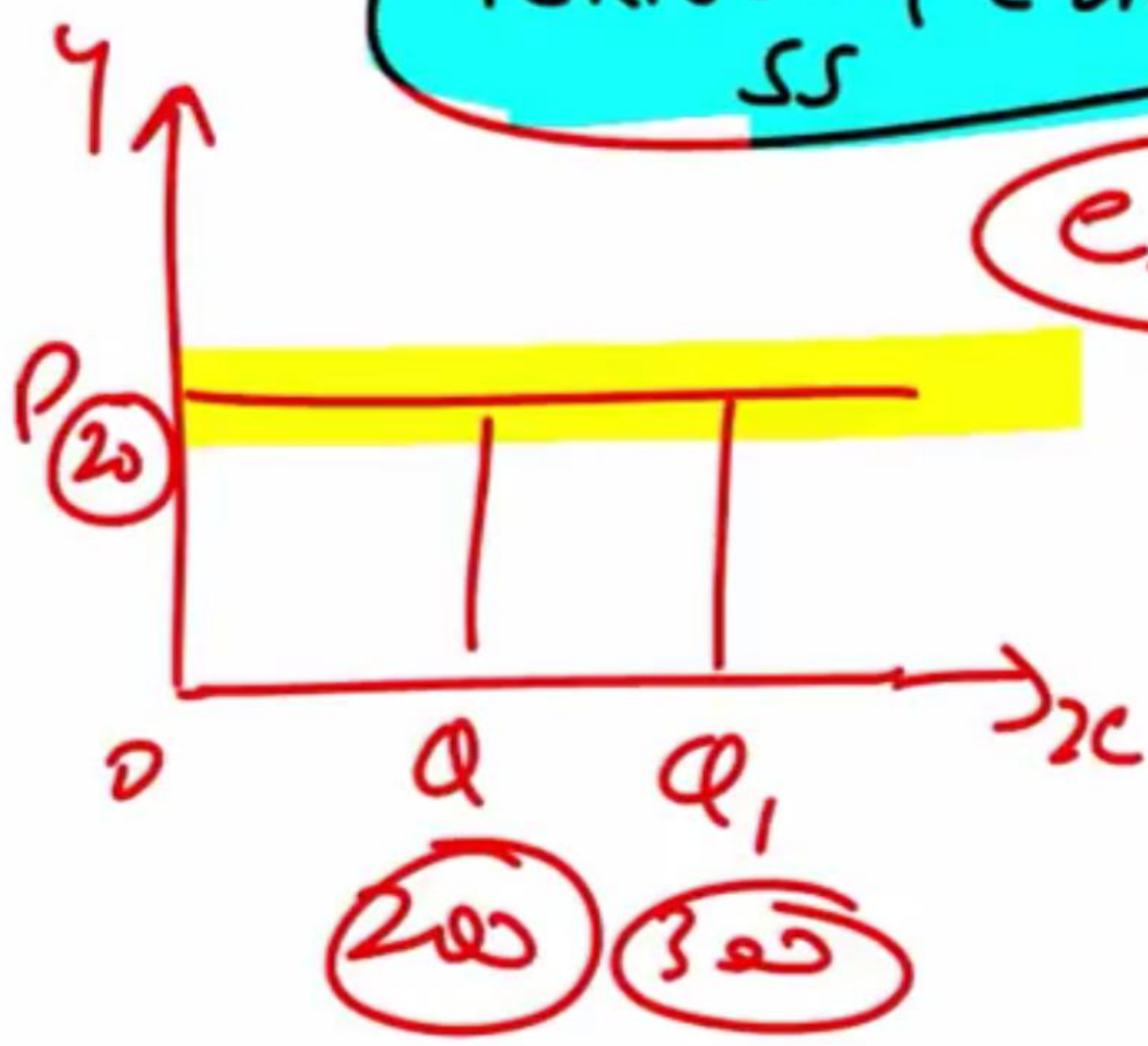
$$e_s = \frac{\% \Delta Q_s}{\% \Delta P}$$

$$= \frac{50}{0}$$

$$e_s = \infty$$

PERFECTLY ELASTIC
SS

$$e_s = \infty$$



3

UNIT ELASTIC SUPPLY

$$es = 1$$

P	Q
20	200
30	300

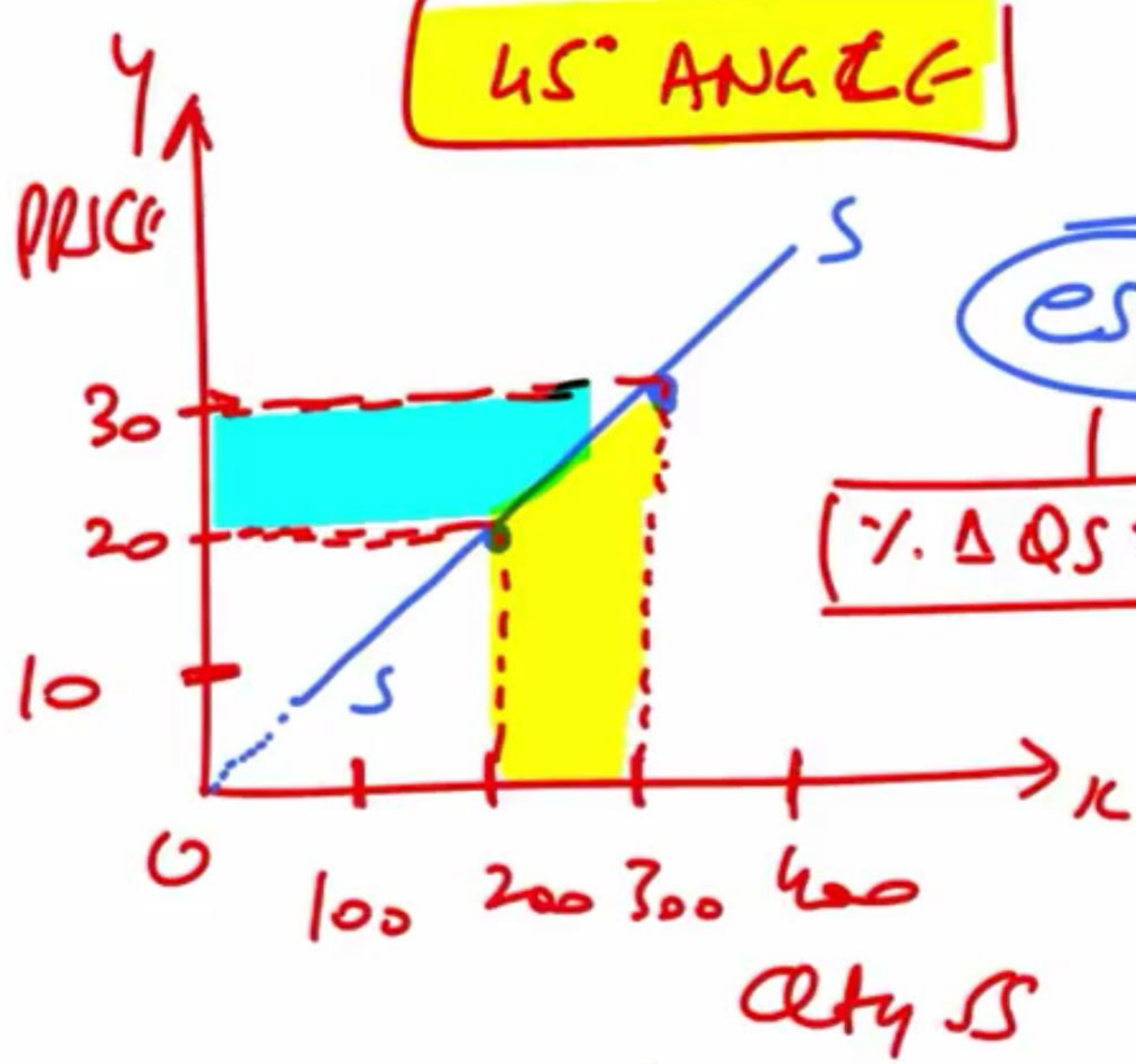
$$\% \Delta QS = \% \Delta P$$

$$es = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$= \frac{100}{100} \times \frac{200}{200}$$

$$es = 1$$

45° ANGLE



$e_s = 1$

$$\left(\% \Delta Q_S = \% \Delta P \right)$$

2

MORE THAN UNIT
ELASTIC SUPPLY

$es > 1$

P	Q.S
20	200
30	400

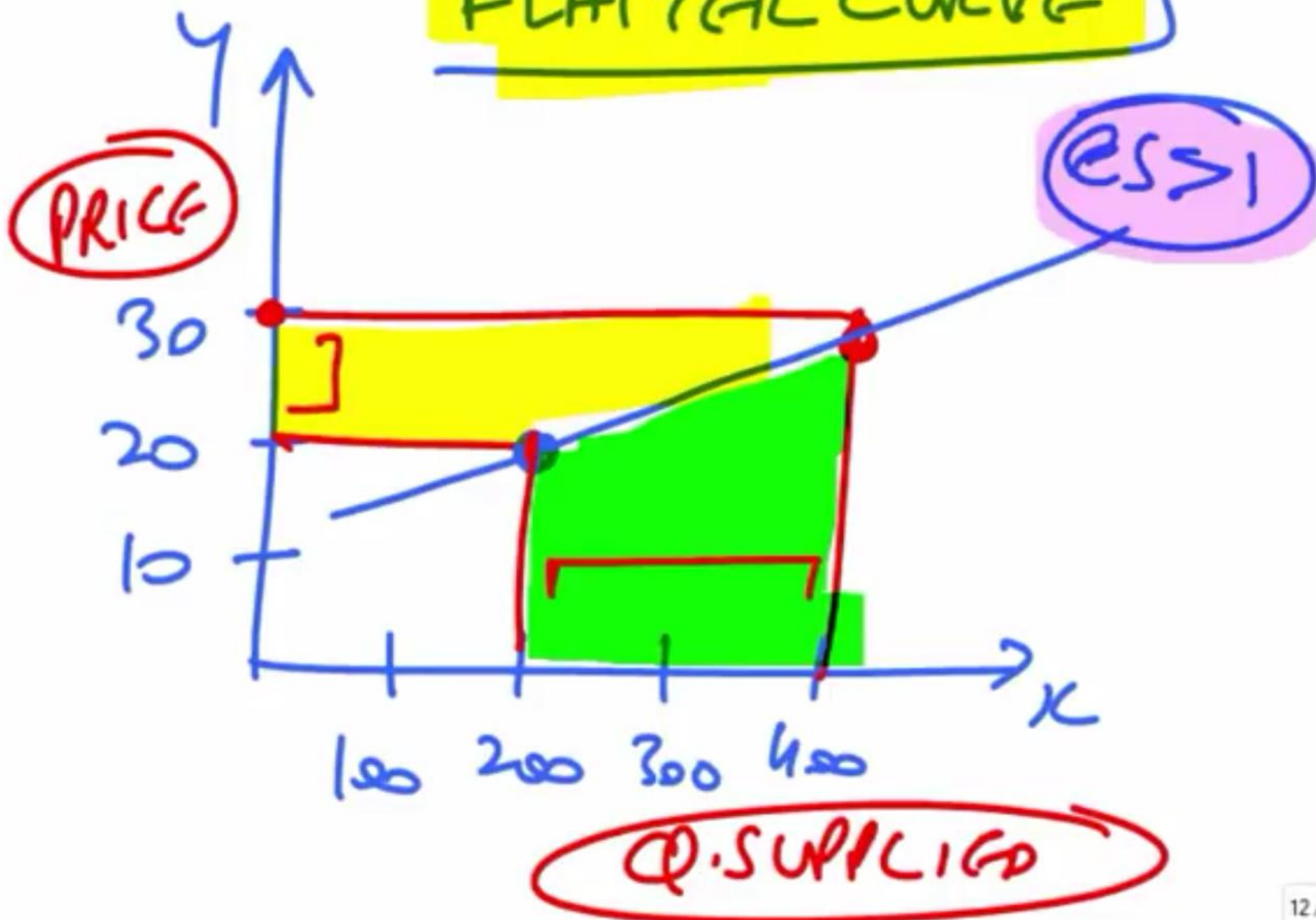
$$es = \frac{\% \Delta Q_S}{\% \Delta P}$$

$$es = \left[\frac{\frac{\Delta Q}{Q} \times 100}{\frac{\Delta P}{P} \times 100} \right]$$

$\% \Delta P < \% \Delta Q_S$

$$es = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q} = \frac{200}{10} \times \frac{20}{200} = 2$$

FLATTER CURVE



4

LESS THAN UNIT ELASTIC
SUPPLY

P	Qs
20	200
30	250

$$\% \Delta Q_s < \% \Delta P$$

$$e_s < 1$$

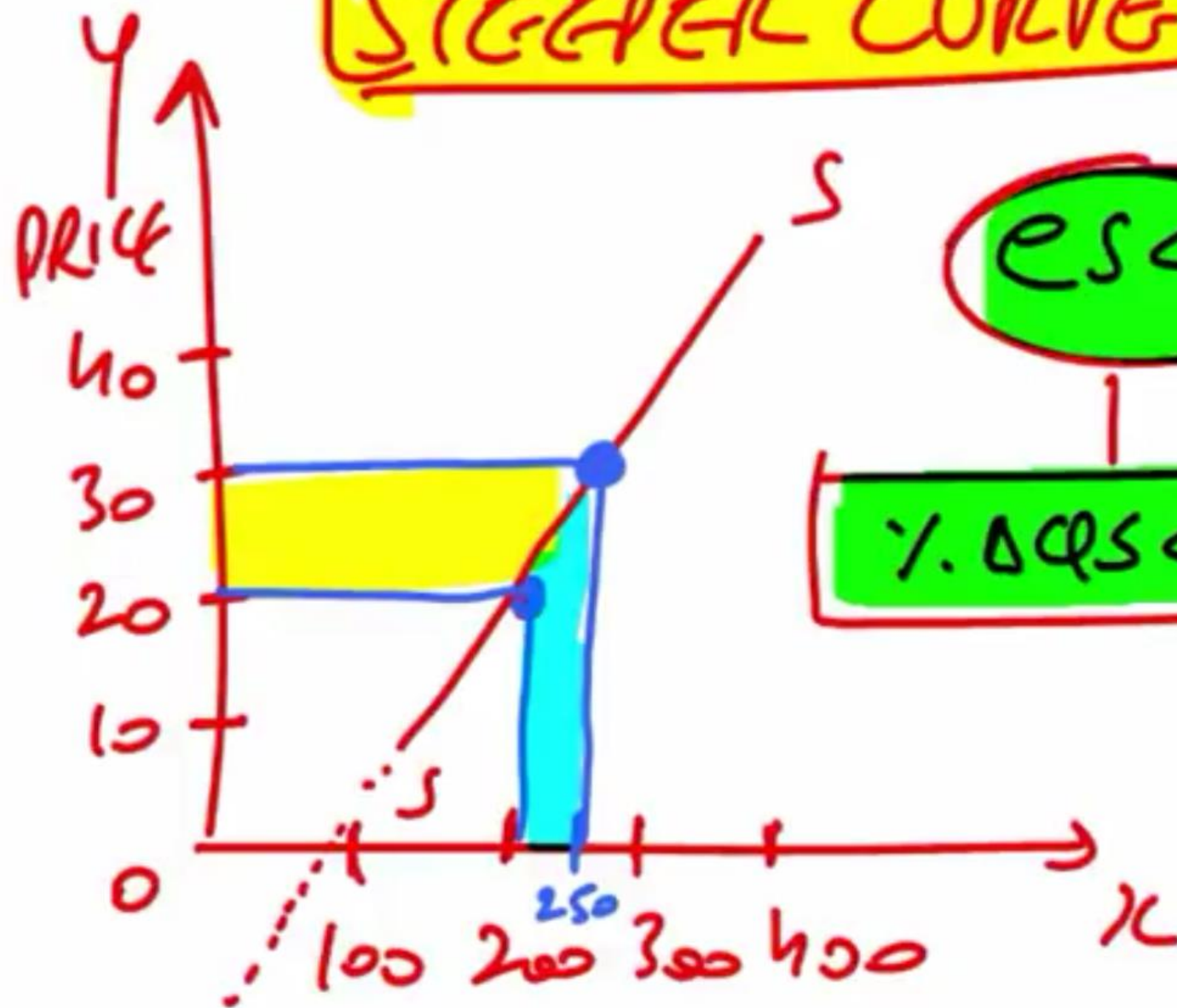
$$e_s = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$= \frac{50}{10} \times \frac{20}{200}$$

$$= 5/10$$

$$e_s = 0.5$$

STEPPER CURVE



$$e_s < 1$$

$$\% \Delta Q_S < \% \Delta P$$

Qty S

5 PERFECTLY INELASTIC SS

P	Q _S
20	200
30	200

$$e_s = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$= \frac{0}{10} \times \frac{20}{200}$$

$$e_s = 0$$

Perfectly Inelastic Supply

P	Q
10	100
15	100

PERFECTLY
INELASTIC DD

P

