
If $Q^S = 0$

$$P = 2$$

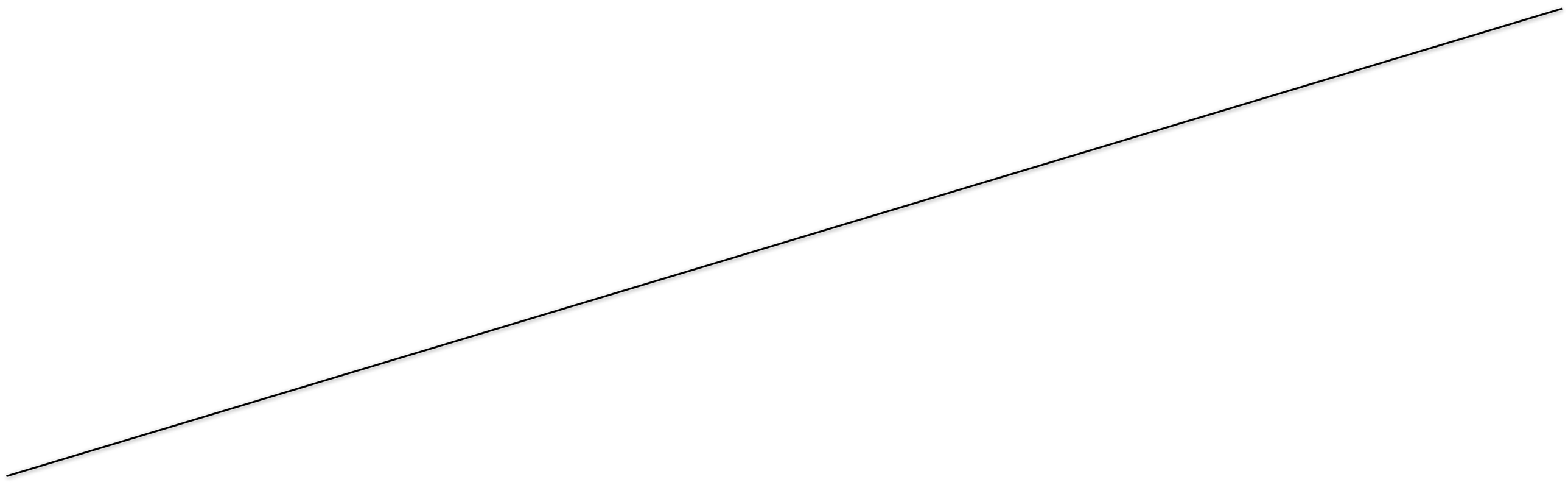
Price

Quantity

$$Q^{S} = -11$$

If P == 0


$Q^S = -11$

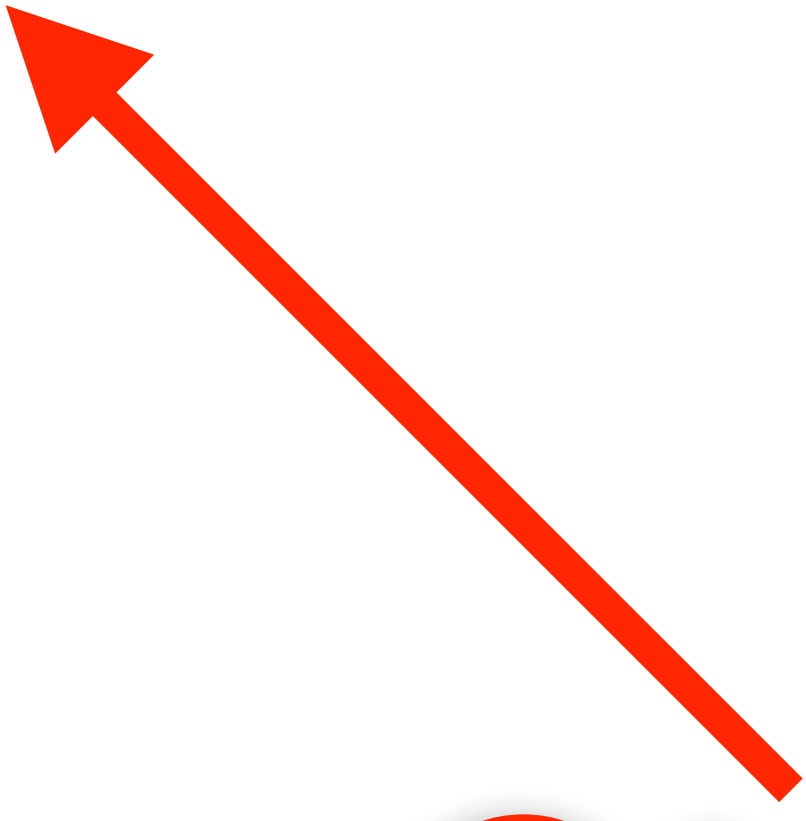



New Supply

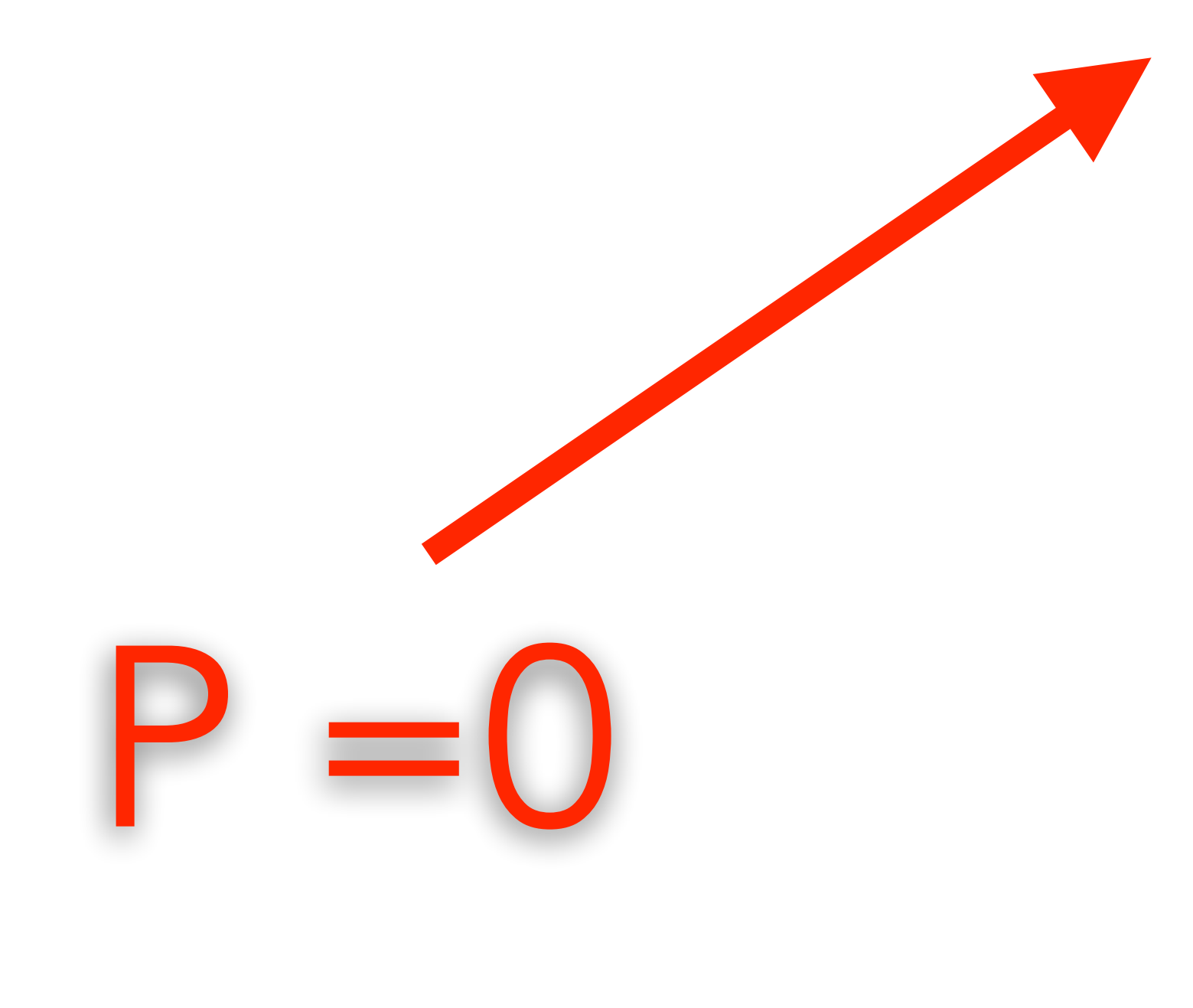
$$0 = -11 + 5.5P$$

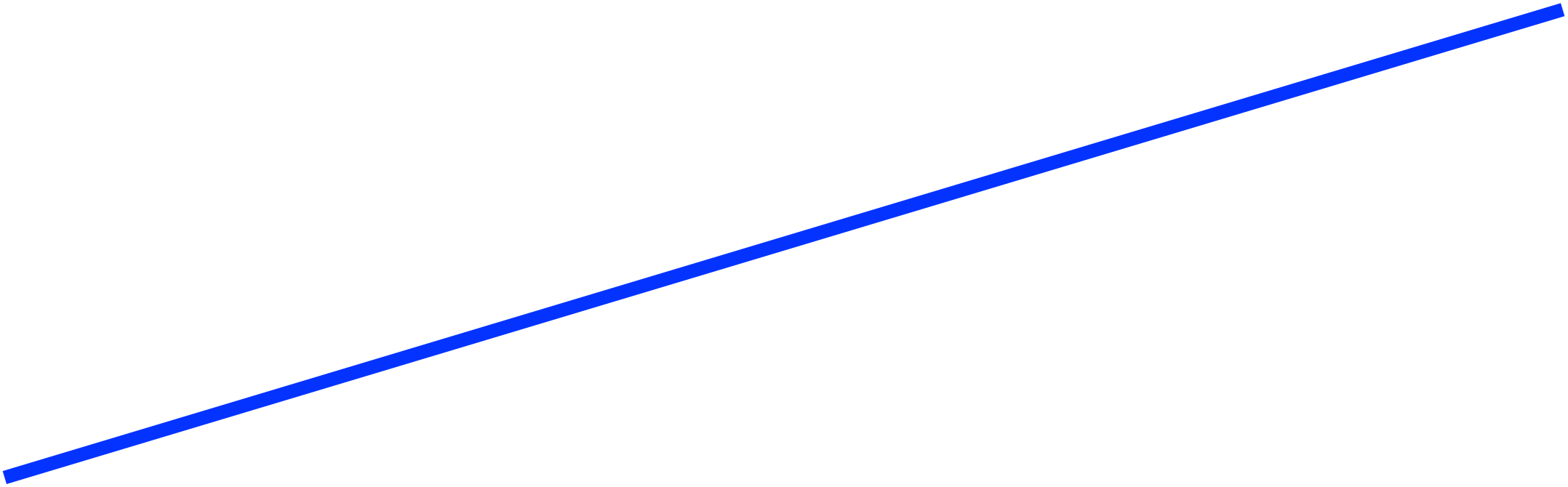
11 = 5.5P

$$P = 11/5.5$$



$$Q^s = 0$$


P =0



$$Q^S = -10 + 5P$$

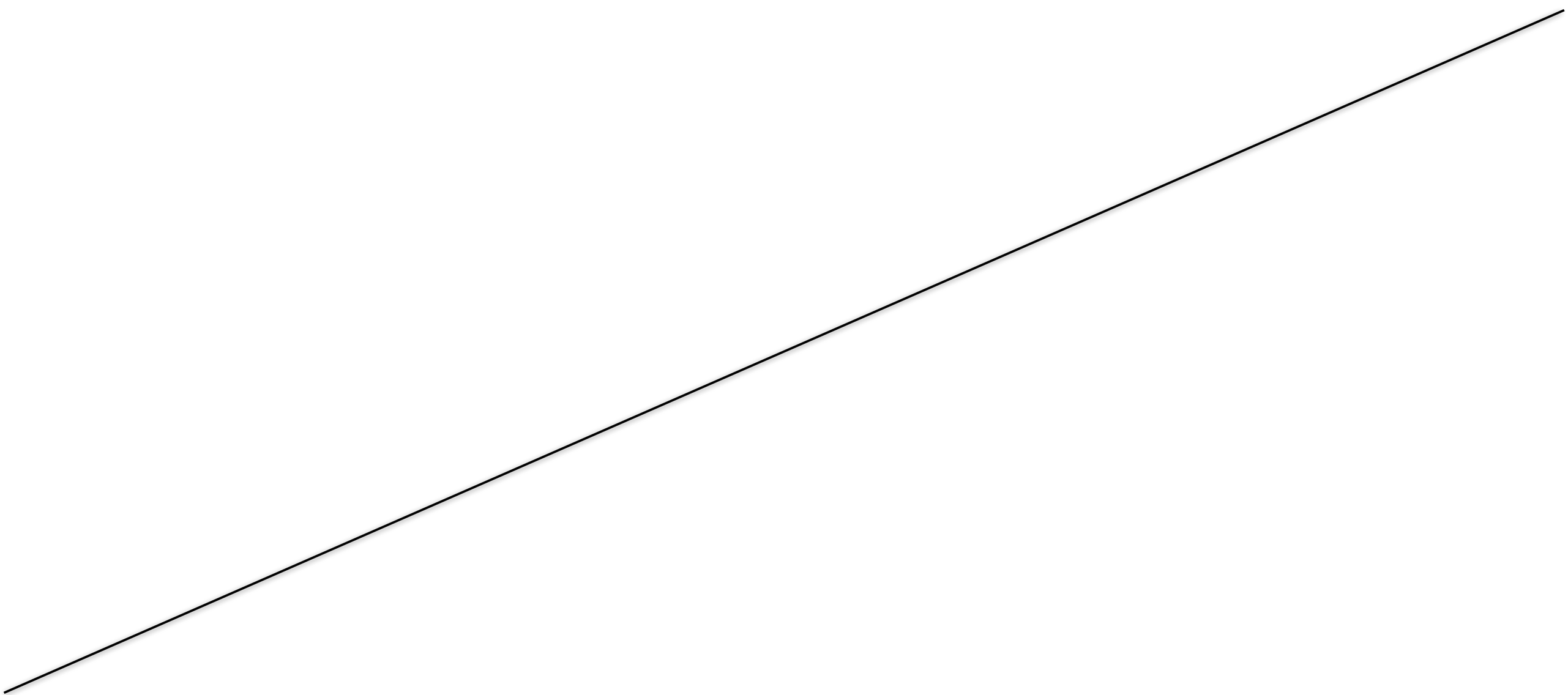
An Improvement in technology allows producers to produce 10% more at all prices

New $Q^s = (-10 + 5P)$ (1.1)

$$\text{New } Q^{s} = -10(1.1) + 5P(1.1)$$

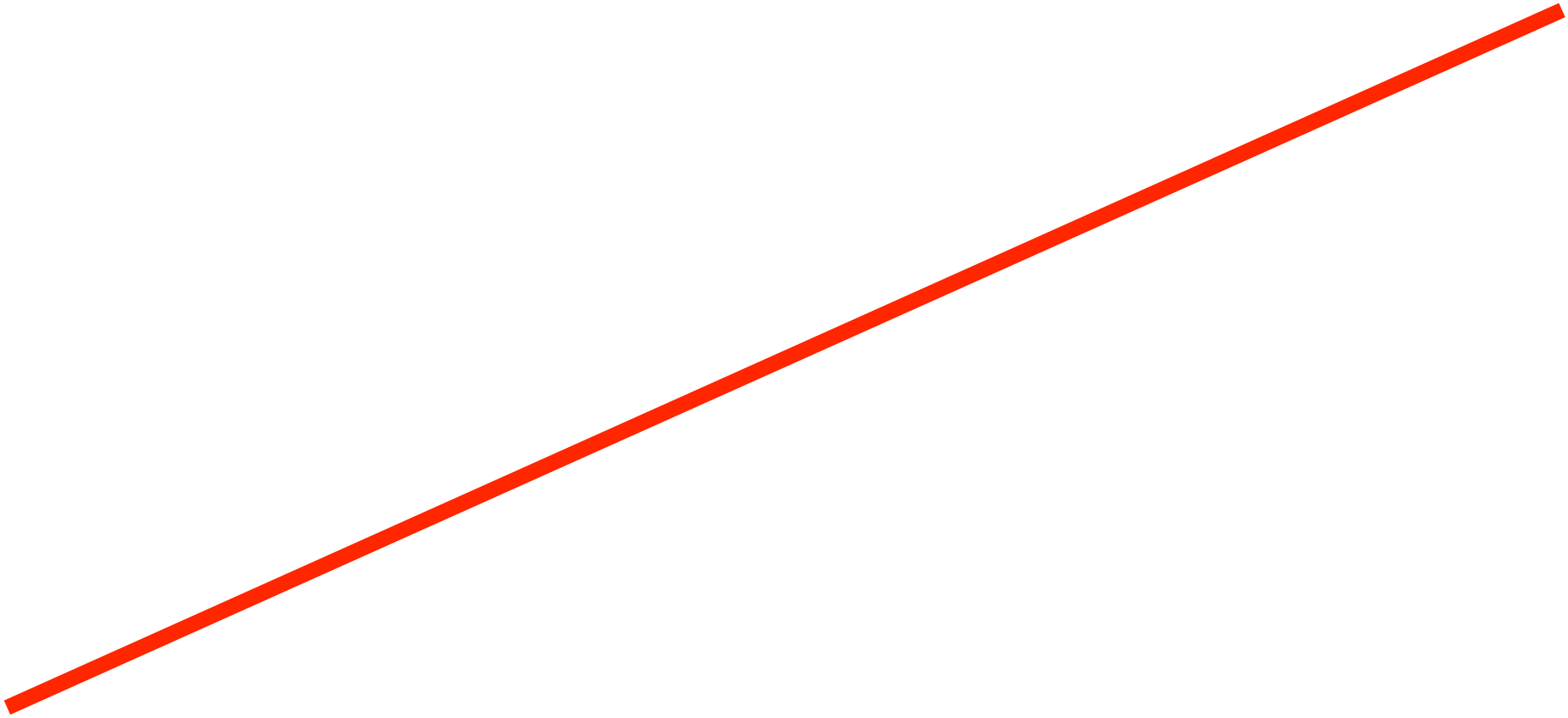
New Supply is 10% larger than old supply

$$Q^{S} = -10$$



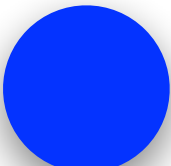

Original Supply

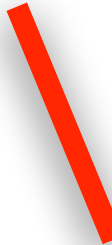
$$P = 2$$

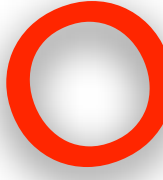


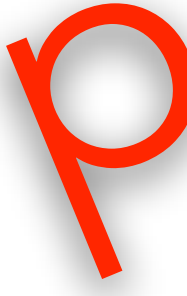
$$\text{New } Q^s = -11 + 5.5P$$

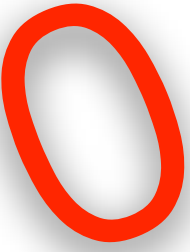
$$P = 2$$



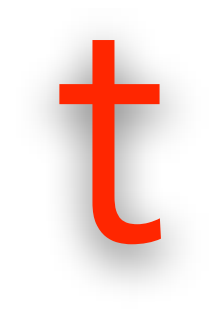




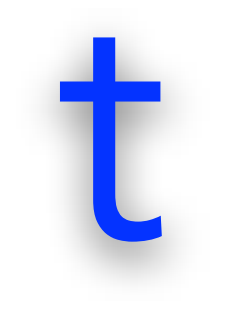


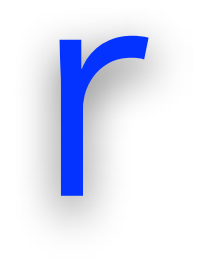


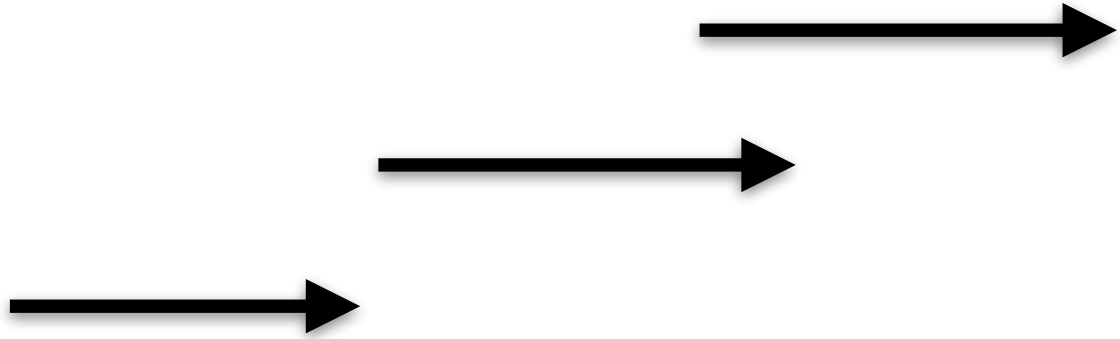
Slope = 2/11




a

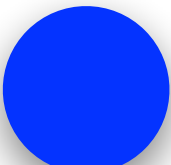






NOT a parallel shift


0



$$Q^S = -10 + 5P$$

$$\text{New } Q^S = -11 + 5.5P$$

Slope = 2/10

Steeper


Flatter

An Improvement in technology allows producers to produce 10% more at all prices

$Q^s = -10 + 5P$

New $Q^s = (-10 + 5P)\ (1.1)$

New $Q^s = -10\ (1.1) + 5P\ (1.1)$

New $Q^s = -11 + 5.5P$

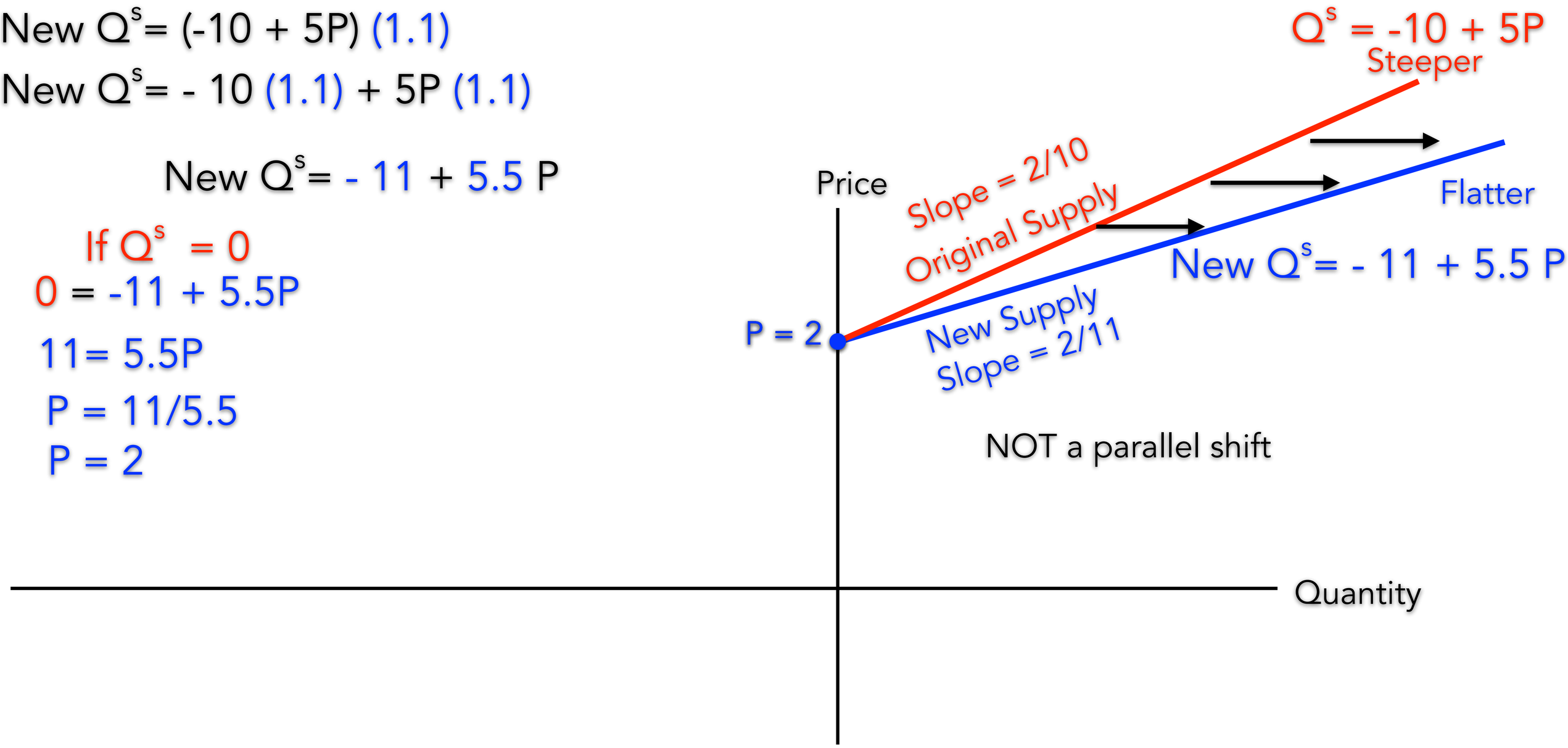
If $Q^s = 0$

$0 = -11 + 5.5P$

$11 = 5.5P$

$P = 11/5.5$

$P = 2$



$Q^s = -10 + 5P$