18

16

14

12

10

8

6

4

2

0

2 4 6 8 10 12 14 16 18 20 22

Government impose a Price Ceiling at $5

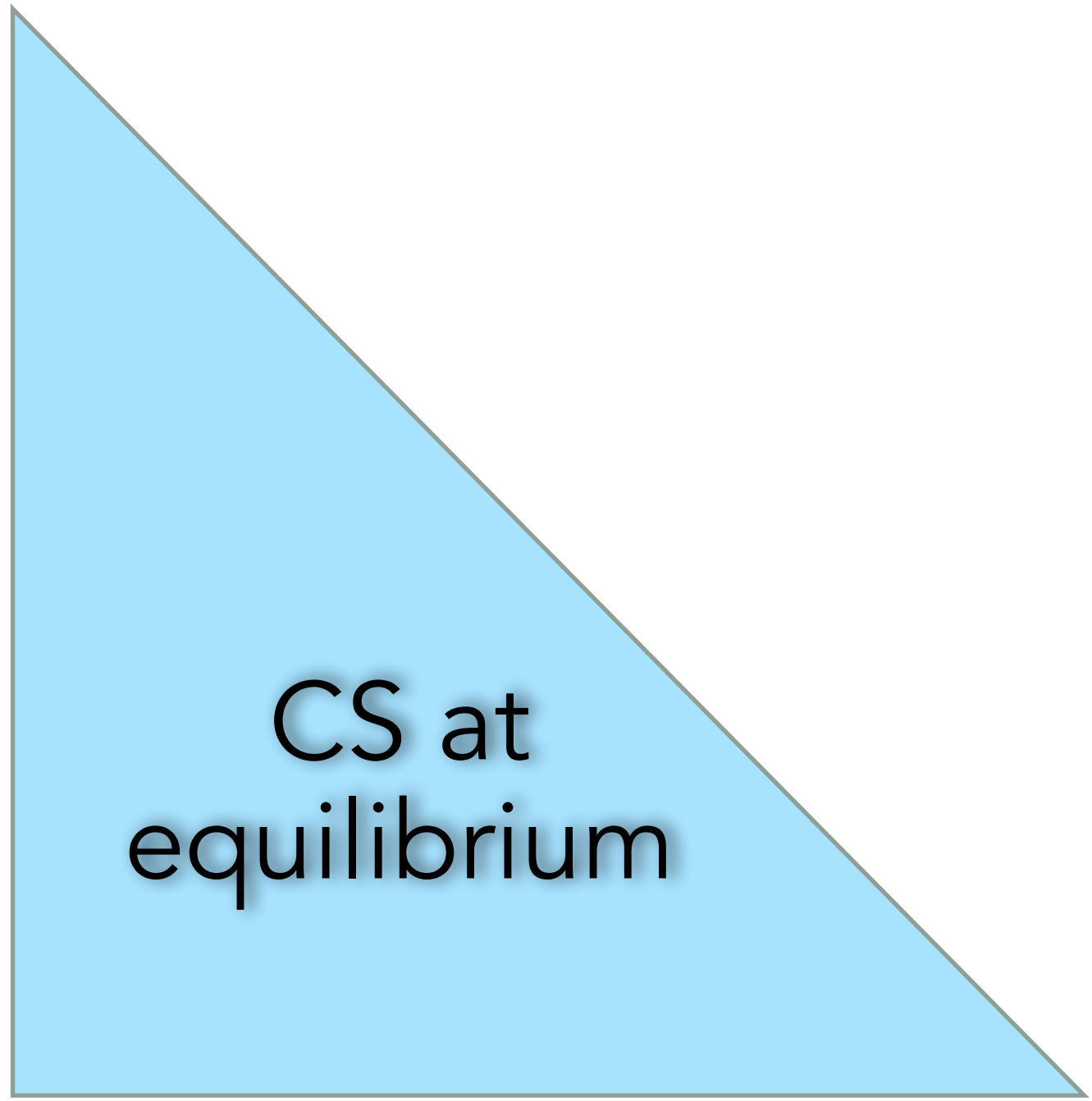
$$CS_{\text{at Equilibrium}} = \frac{(18\text{-}7) \times 11)}{2} = 60.5$$

$$PS_{\text{after ceiling}} = \frac{(5-1) \times 7}{2} = 14$$

PS at equilibrium

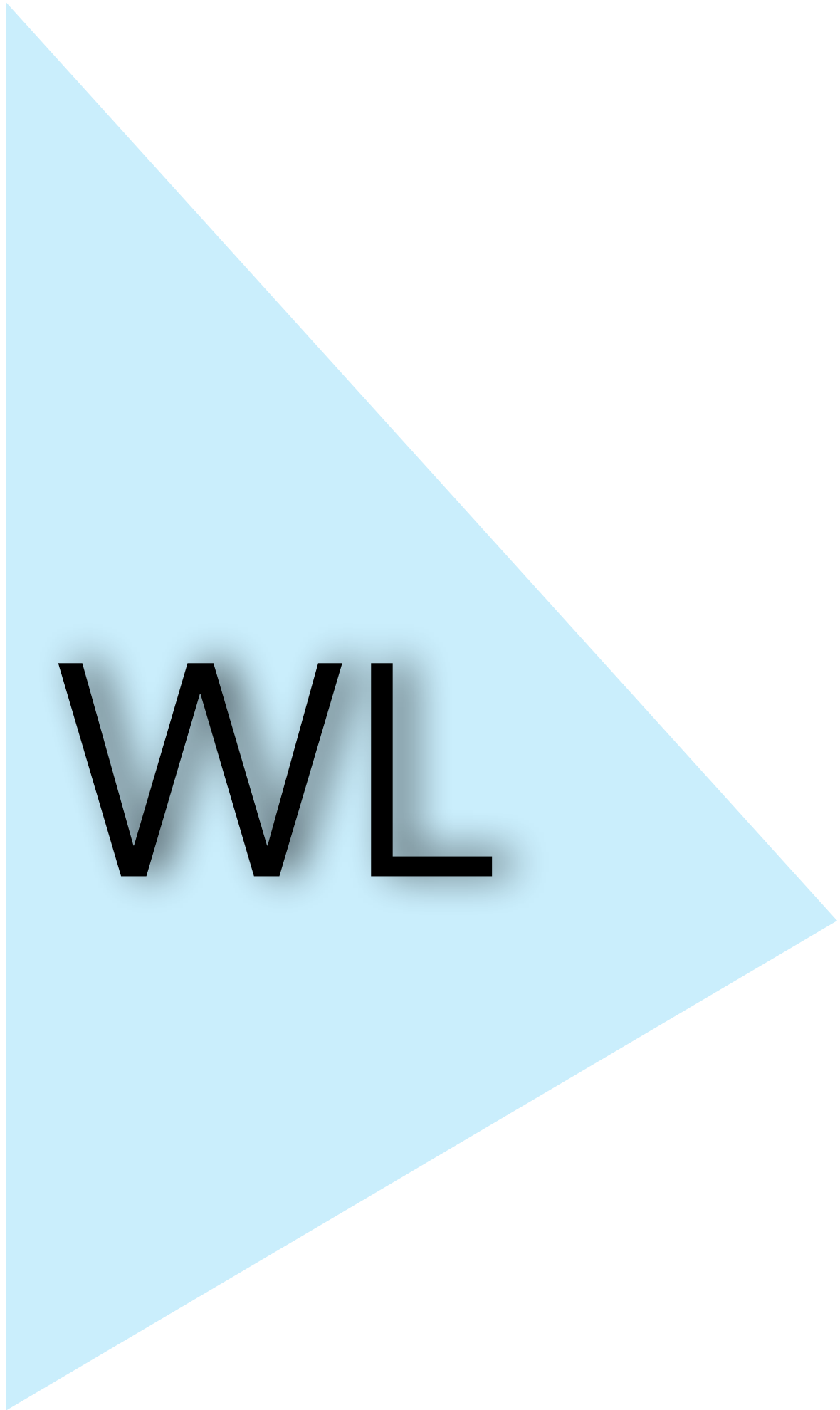
$$PS_{\text{at Equilibrium}} = \frac{(7\text{-}1) \times 11)}{2} = 33$$

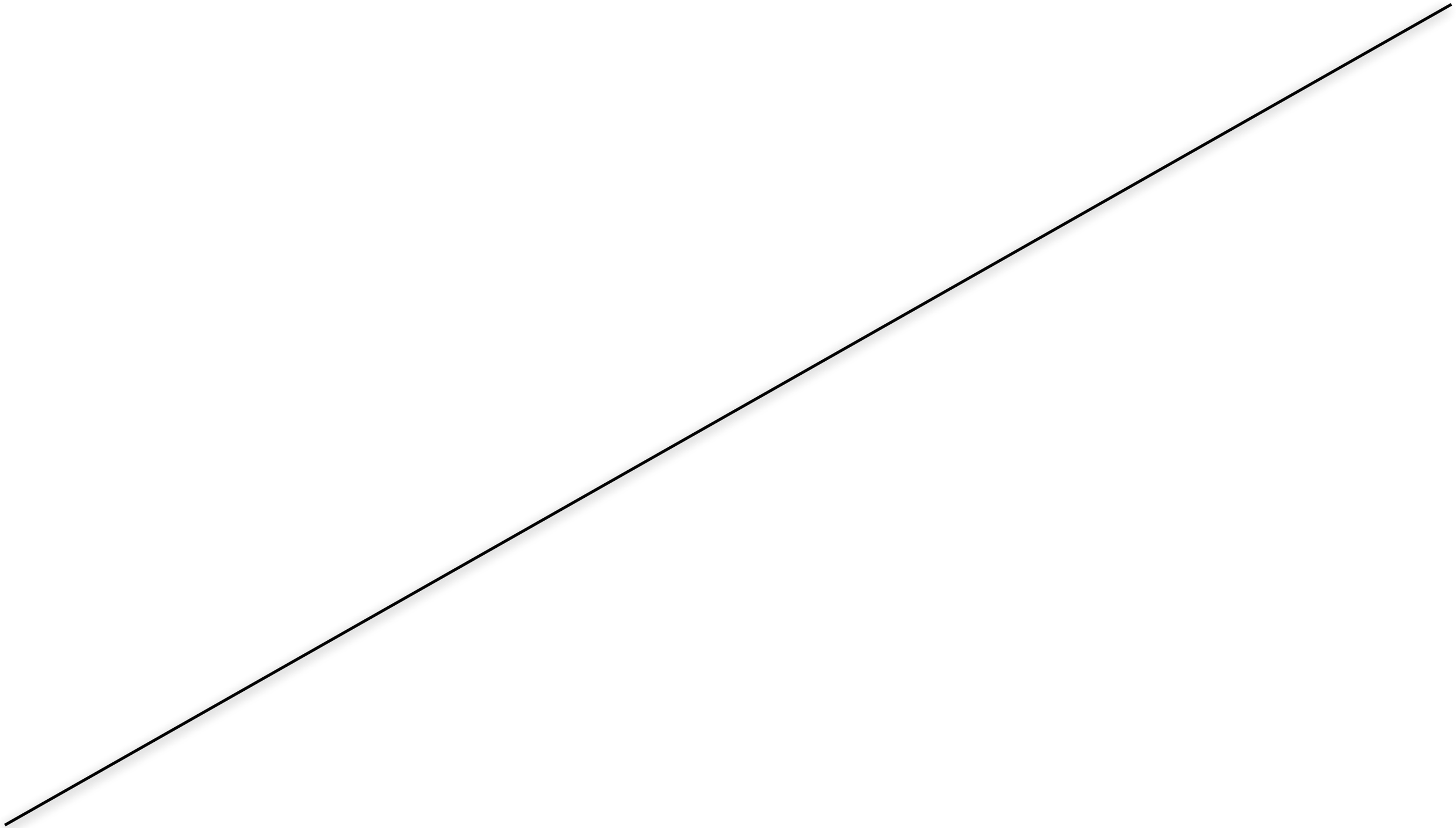
$$CS_{\text{after ceiling}} = \frac{[(18-5)+(11-5)]\times 7}{2} = 66.5$$


CS at
equilibrium

CS after Ceiling

PS after Ceiling


WL



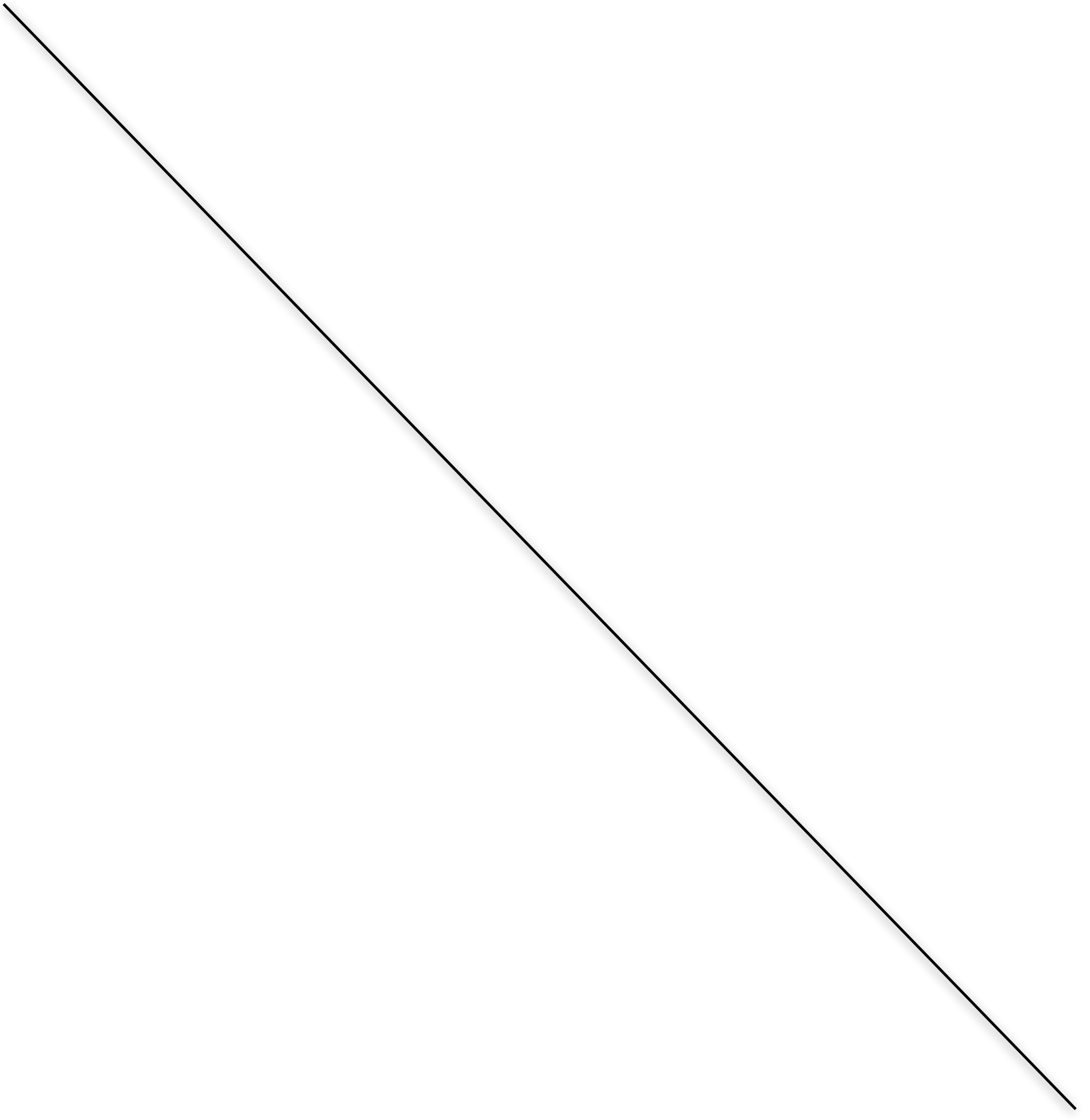
$$WL_{\text{after ceiling}} = \frac{(11 - 5)x(11 - 7)}{2} = 12$$

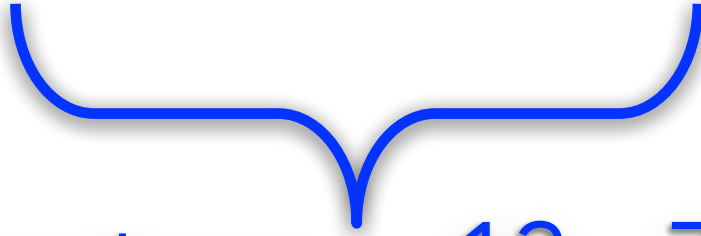
Lost PS

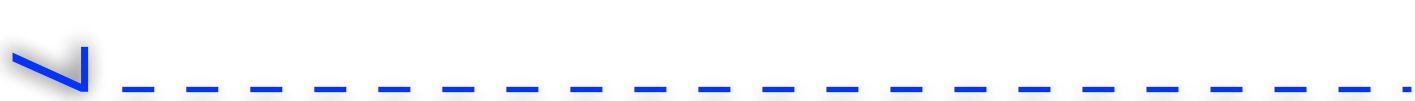
Gained CS

$$\text{Tax/Subsidy} = (7 - 5) \times 7 = 14$$

7



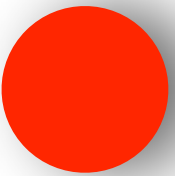

Shortage = 13 - 7



5

11

Tax to Producer
Subsidy to Consumer



$$CS_{\text{at Equilibrium}} = \frac{(18-7) \times 11)}{2} = 60.5$$

$$PS_{\text{at Equilibrium}} = \frac{(7-1) \times 11)}{2} = 33$$

Government impose a Price Ceiling at $5

$$CS_{\text{after ceiling}} = \frac{[(18-5)+(11-5)] \times 7}{2} = 66.5$$

$$PS_{\text{after ceiling}} = \frac{(5-1) \times 7}{2} = 14$$

$$WL_{\text{after ceiling}} = \frac{(11-5) \times (11-7)}{2} = 12$$

Tax/Subsidy = (7 - 5) x 7 = 14