





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





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

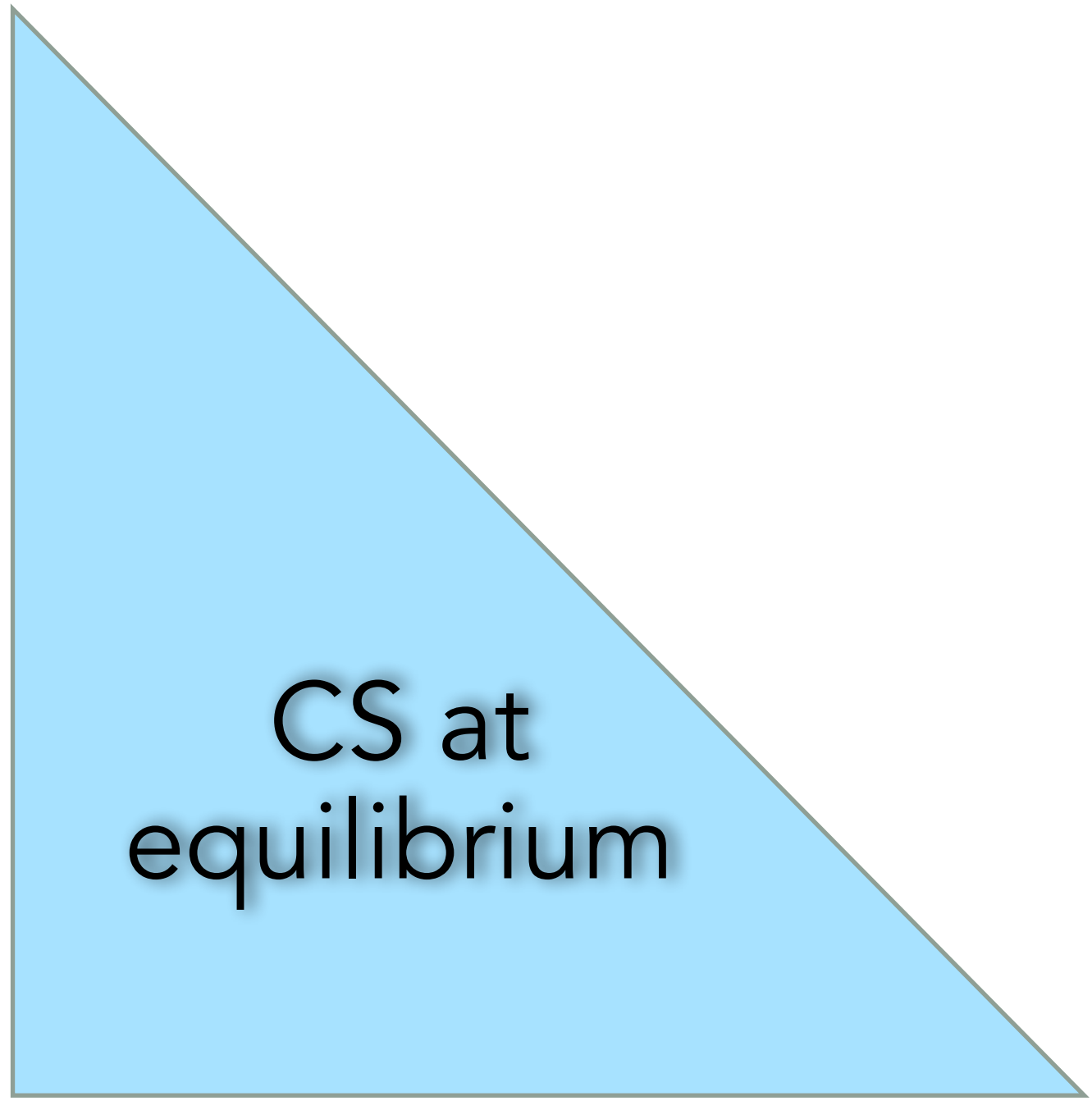


$$\text{PS after ceiling} = \frac{(5-1) \times 7}{2} = 14$$

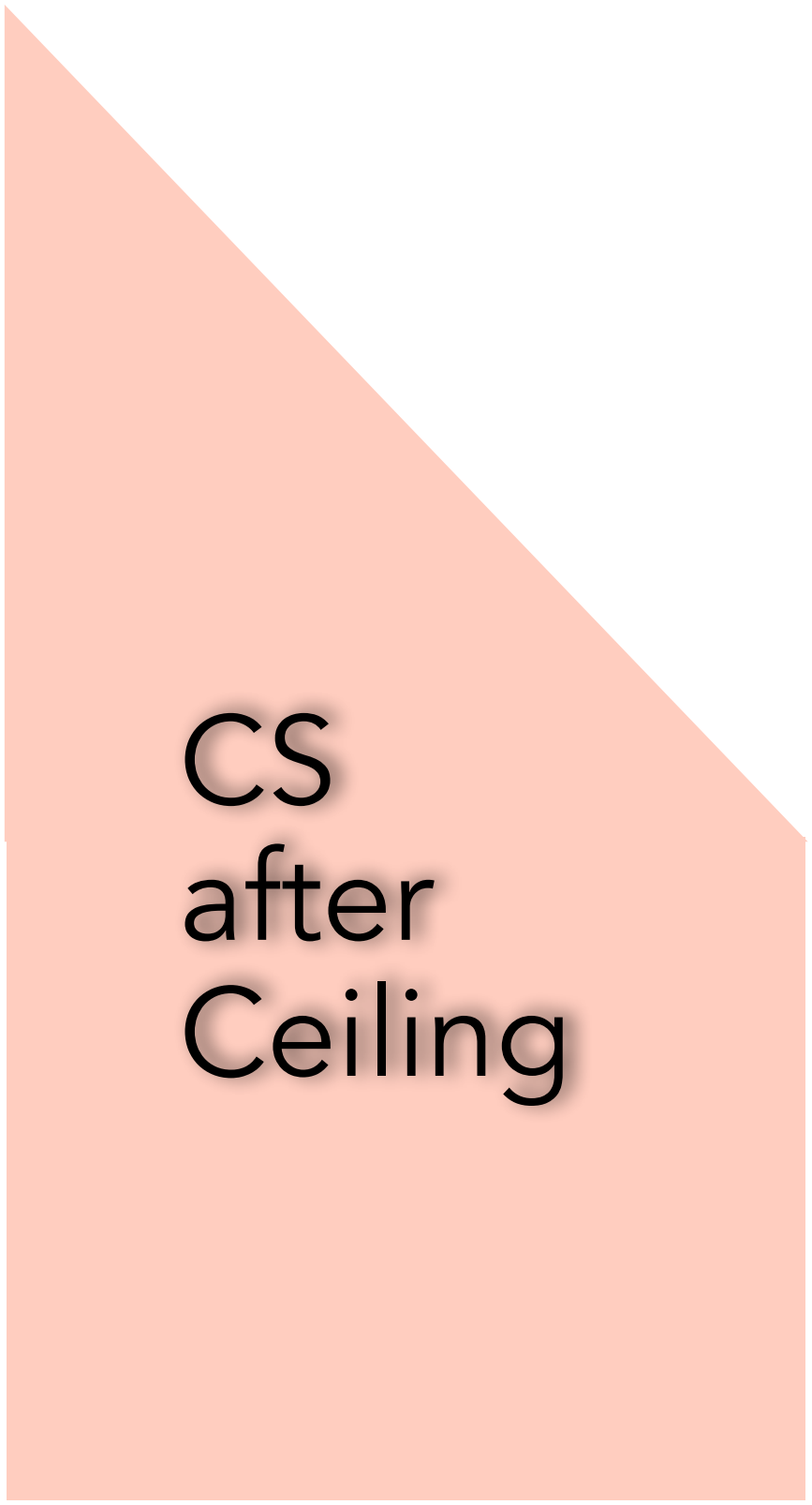
PS at  
equilibrium

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

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



CS at  
equilibrium



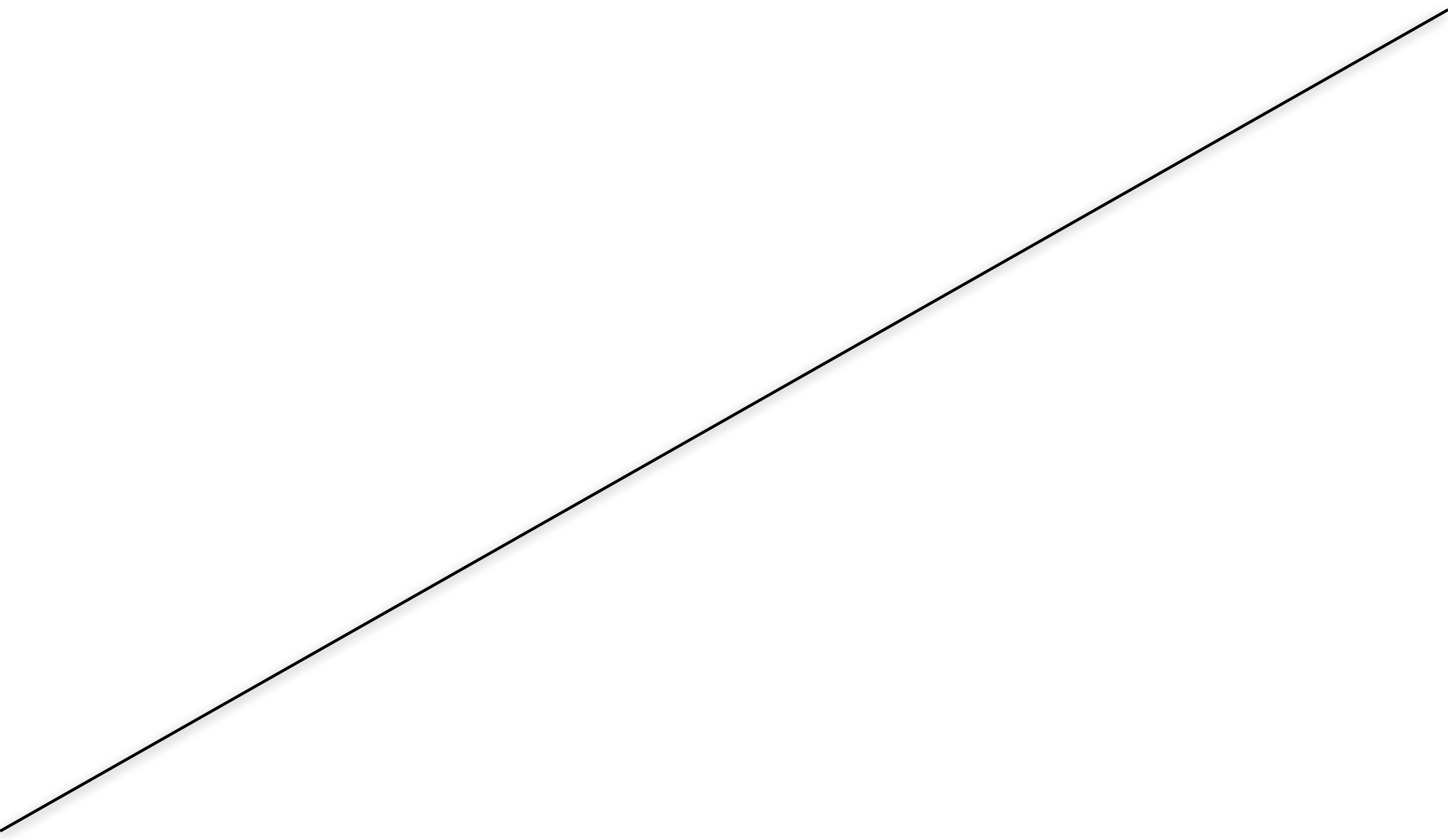
CS  
after  
Ceiling

PS after  
Ceiling



**WL**





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



Lost PS

Gained CS

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

7

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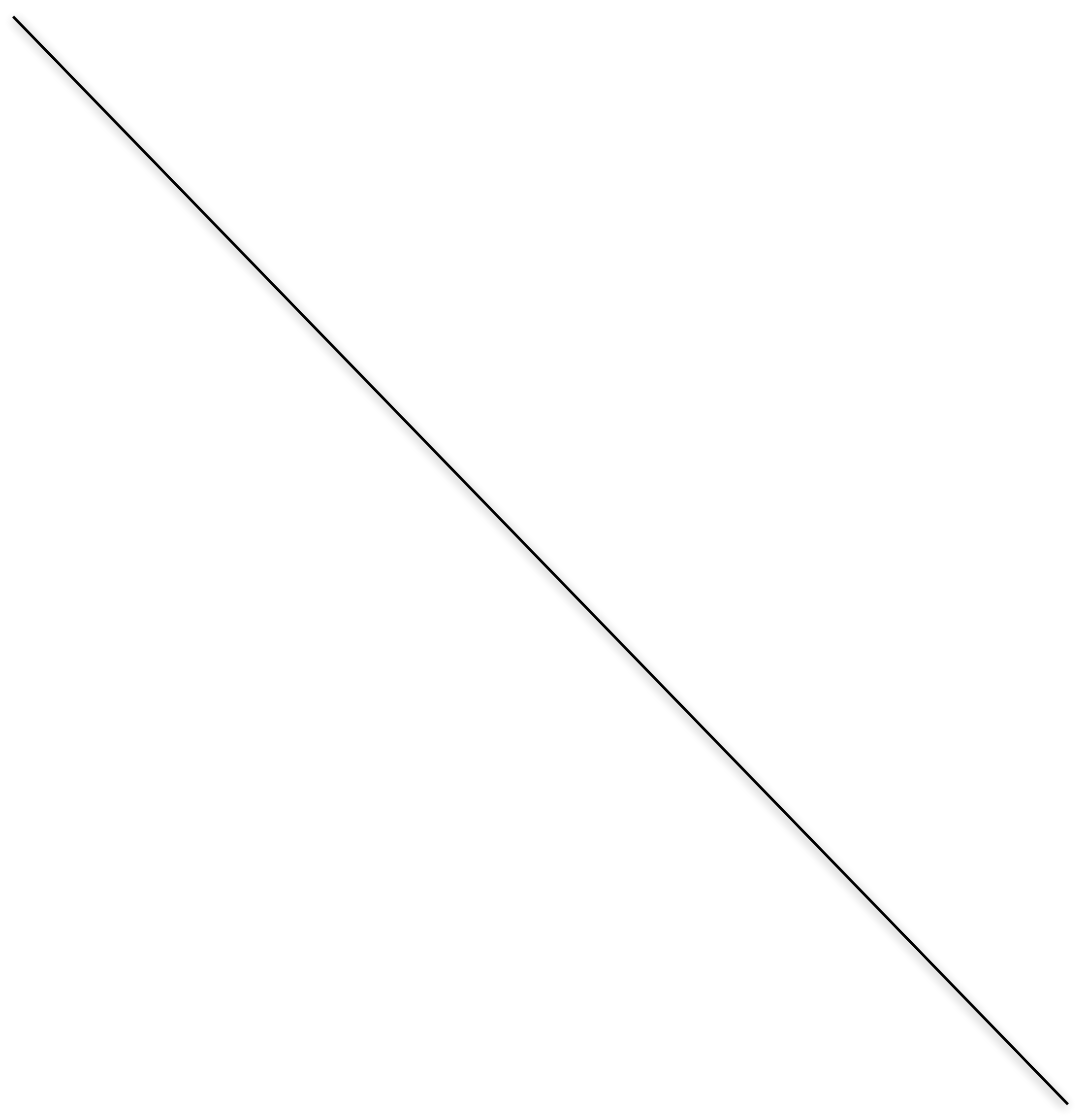
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$$\text{Shortage} = 13 - 7$$



1  
2  
3  
4  
5  
6  
7  
8  
9

13

1

1

1

1

1

1

1

1

1

1

1

7

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

5



11

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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

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

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

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

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

