MR= 10

MR=6


MR=5

MC

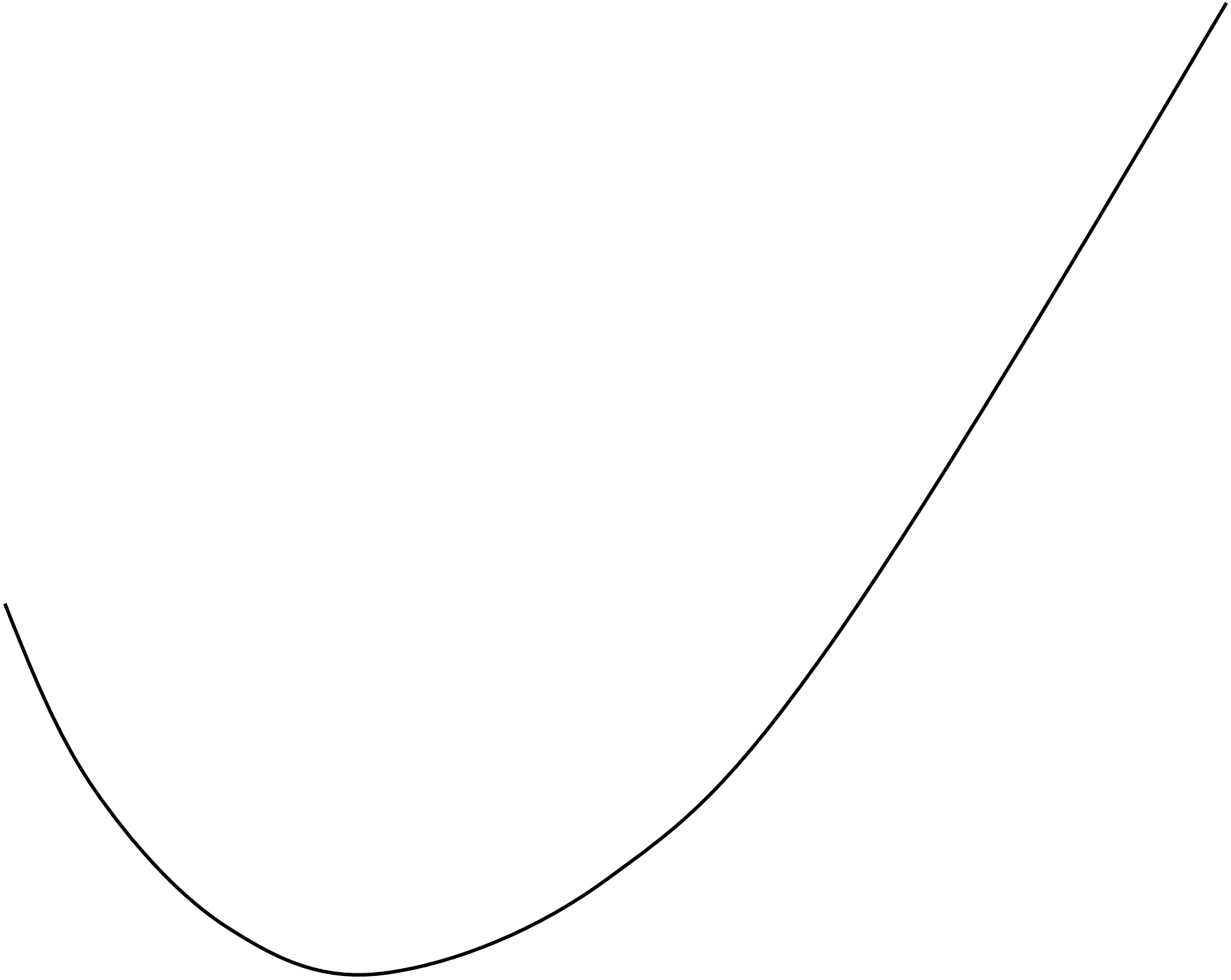
If Price = AVC the firm is Indifferent between shutting down and producing q_0

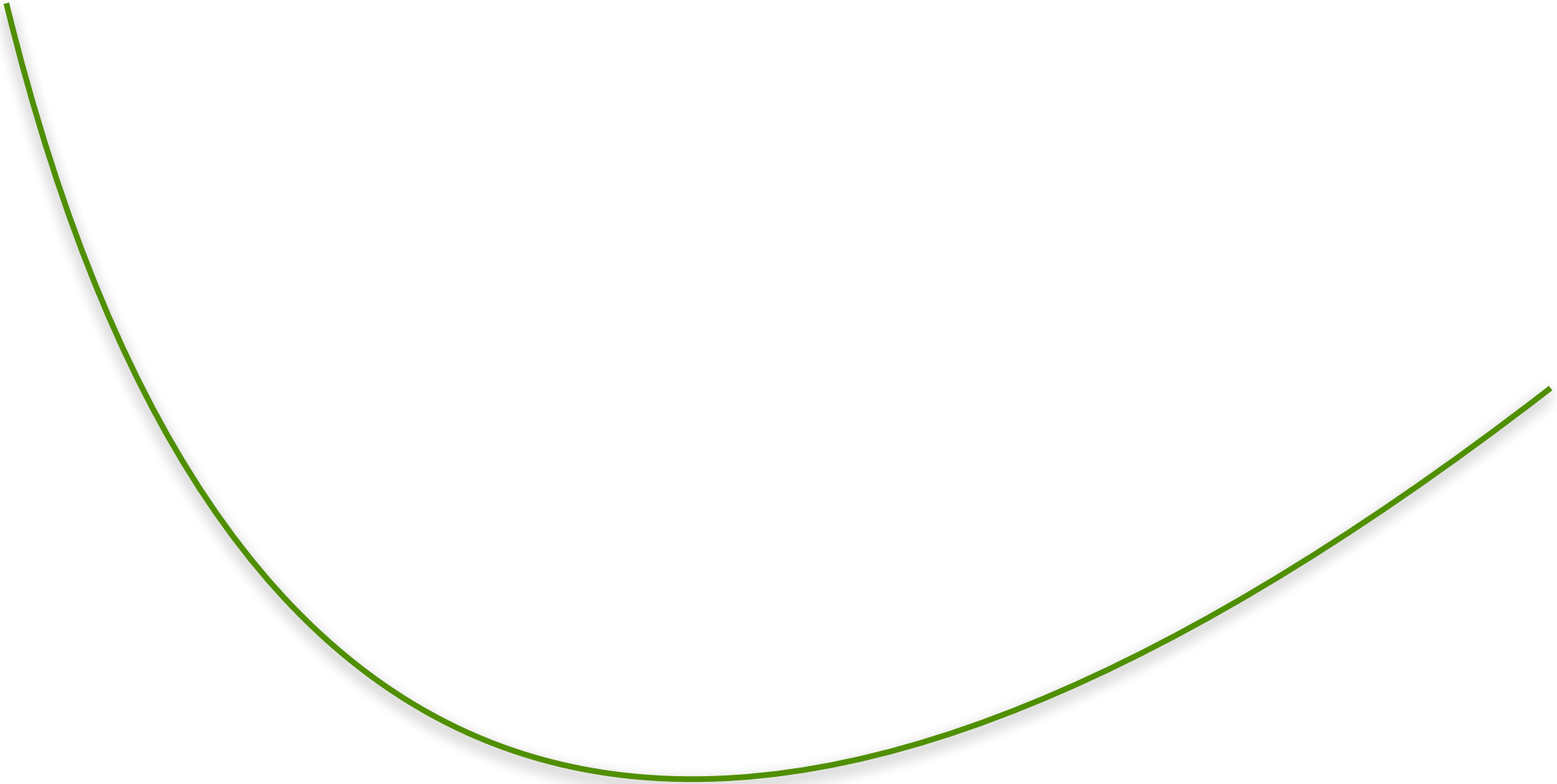

AVC

2 - MR=2

If Price < AVC the firm should shut down (produce zero units)

The Firm's Short Run Decision: An example with numbers





6

5


4
MR=4

3 - MR=3

1
MR=1

Quantity Supplied in the Short Run by each firm

Price	Q^s

10

135

6

110

5

105

4

95

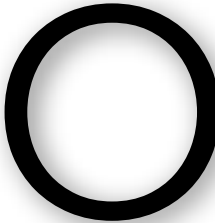
3 0 or 80

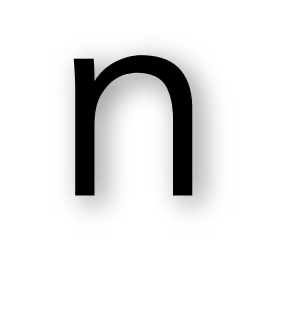
2 0

1

0

If Price > AVC the firm should produce q* (where MC = MR)

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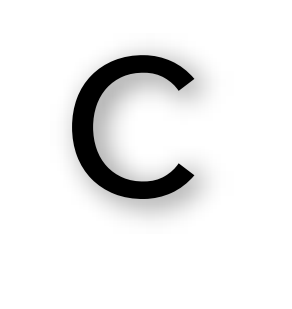
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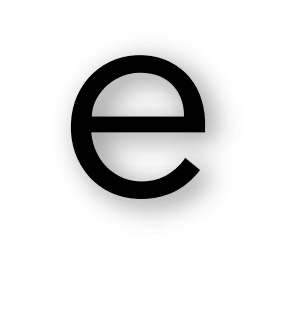

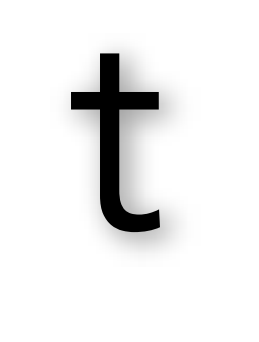
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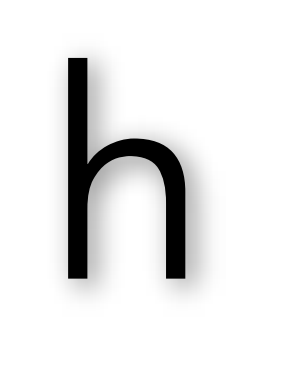

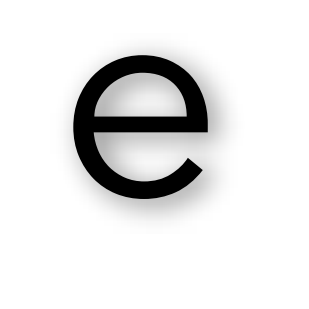
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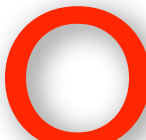

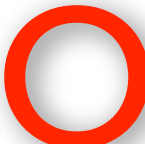

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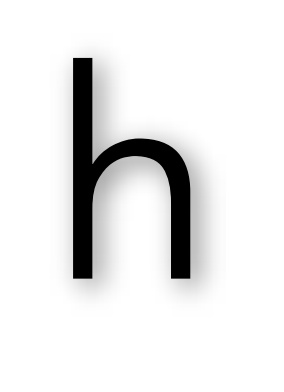

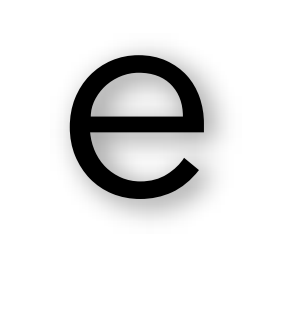

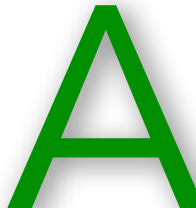
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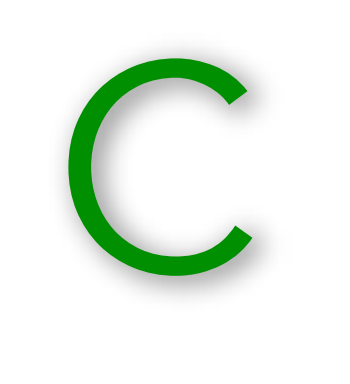

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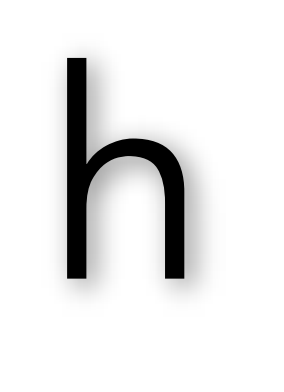

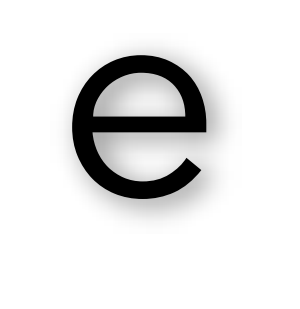
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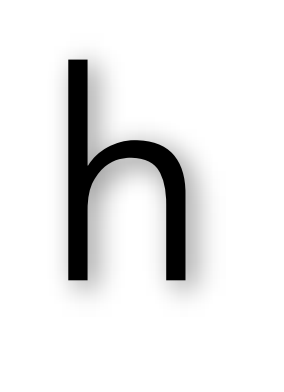

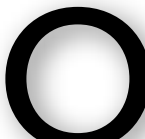

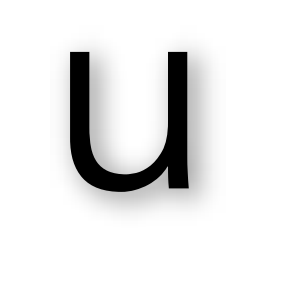

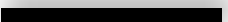

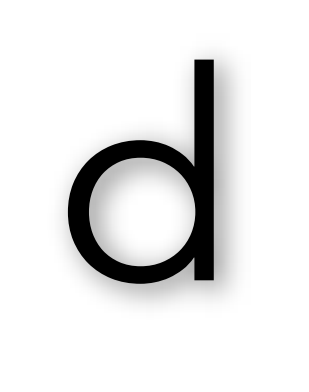

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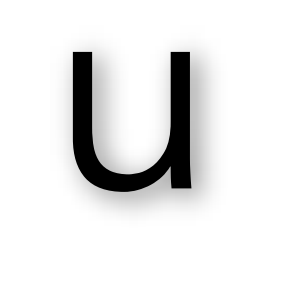

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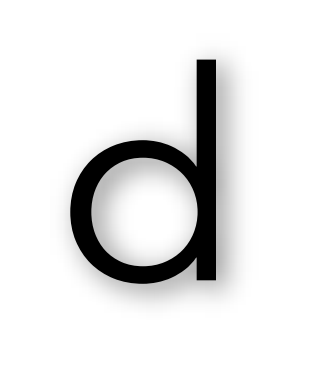

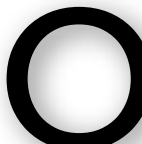


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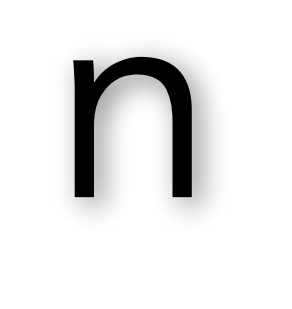
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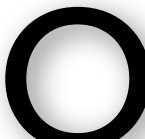

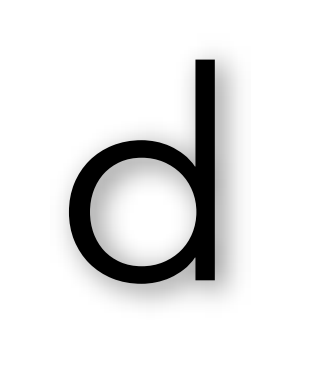

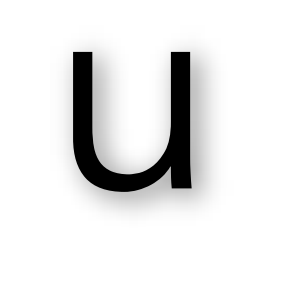

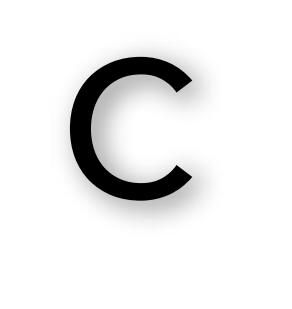
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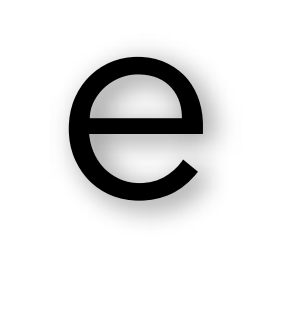

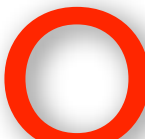


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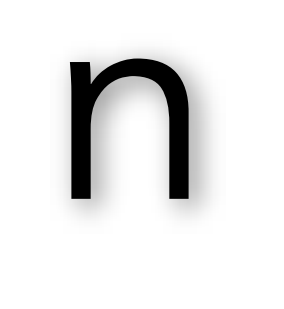
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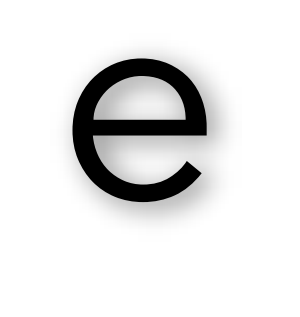
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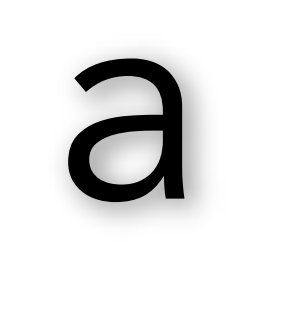
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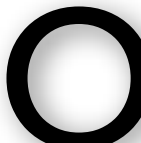

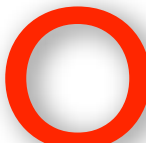


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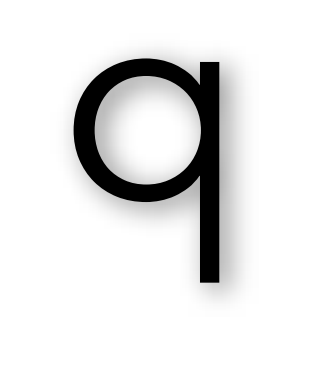


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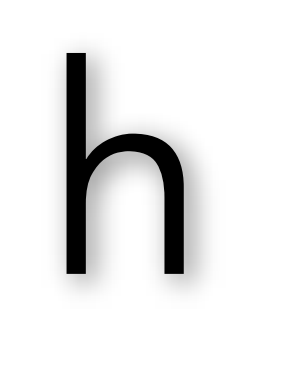

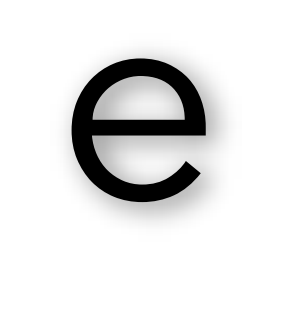
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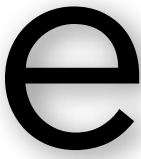

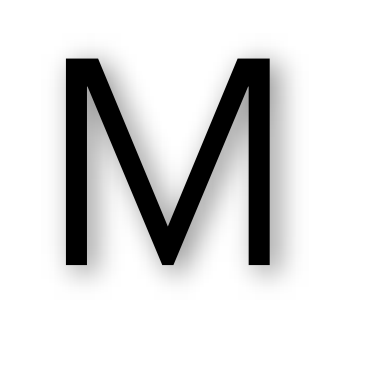
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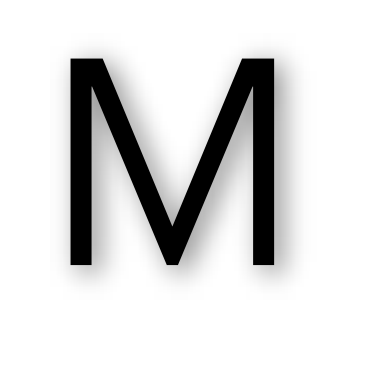
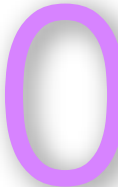

M


R


q = 0
80

$$q = 0$$



Quantity Supplied in the Short Run all firms in the industry

Q^s

Assume that there are **100** firms in this Perfectly Competitive industry, total supply is the **sum** of the individual firm's supply

135 x 100 =13,500

110 x 100 = 11,000

105 x 100=10,500

95 x 100= 9,500

0 or 80 x 100=8,000

0 x 100

0 x 100

Once the Price drops below the AVC the firm should shut down (produce zero units) instead of producing q* (where MC = MR)

$$q = 0$$

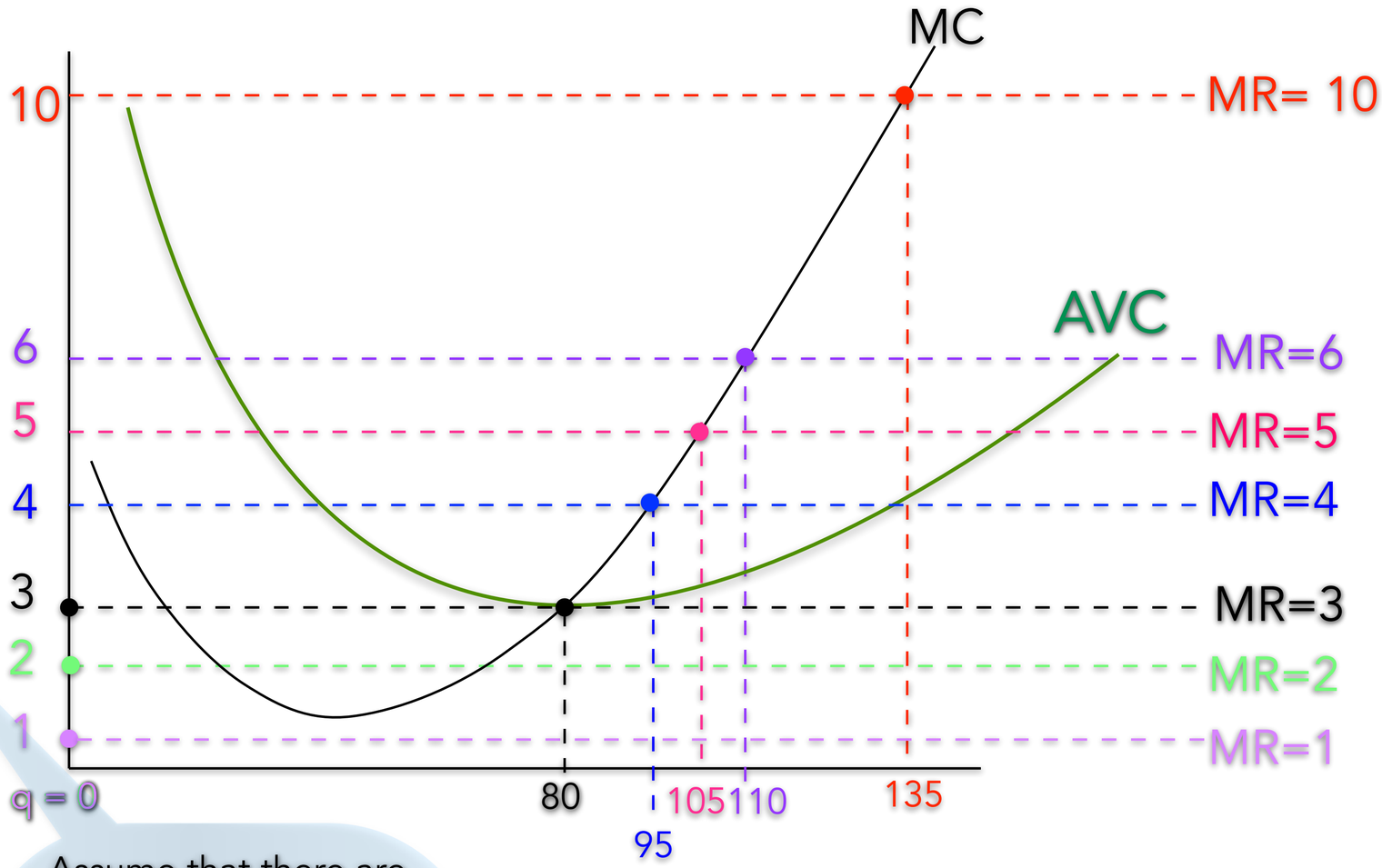
The Firm's Short Run Decision: An example with numbers

If Price > AVC the firm should produce q* (where MC = MR)

If Price = AVC the firm is Indifferent between shutting down and producing q_0

If Price < AVC the firm should shut down (produce zero units)

Price	Quantity Supplied in the Short Run by each firm Q^s	Quantity Supplied in the Short Run all firms in the industry Q^s
10	135	135 x 100 =13,500
6	110	110 x 100 = 11,000
5	105	105 x 100=10,500
4	95	95 x 100= 9,500
3	0 or 80	0 or 80 x 100=8,000
2	0	0 x 100
1	0	0 x 100



Assume that there are **100** firms in this Perfectly Competitive industry, total supply is the **sum** of the individual firm's supply

Once the Price drops below the AVC the firm should shut down (produce zero units) instead of producing q* (where MC = MR)

The Firm's Long Run Decision