## **Competitive vs Monopoly MR**

Key difference between competition and monopoly:

MR constant for competitor:

 $TR = P^* * Q$  MR = TR(Q + 1) - TR(Q)  $MR = P^* * (Q + 1) - P^* * Q$   $MR = P^*$ 

For a competitor, MR always equals the market P

MR will *fall* as Q rises for a monopoly

Competitor	Monopolist
P = 1200	P = 4000 - 300 * Q



MR is constant

1 2

3 4

5 6 7

8

9 10

0

0

MR falls twice as fast as AR

3 4

5 6 7

9 10

8

0

0

1 2



Monopoly MR falls for two reasons:

- 1. Must lower P to sell Q + 1
- 2. Reduces revenue on first Q as well

Example:

Suppose Q = 3, P = \$3100:TR = 3\*3100 = \$9300Move to Q = 4, P = \$2800:TR = 4\*2800 = \$11200

MR = \$11,200 - \$9,300 = \$1900

Extra revenue from 4th:	\$2800
Reduced revenue on other 3:	$(\$3100 - \$2800) \ast 3 = \$900$
Net change in revenue:	\$2800 - \$900 = \$1900