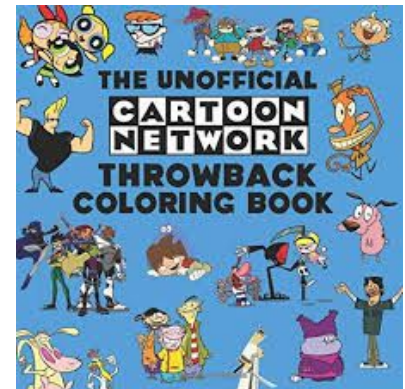
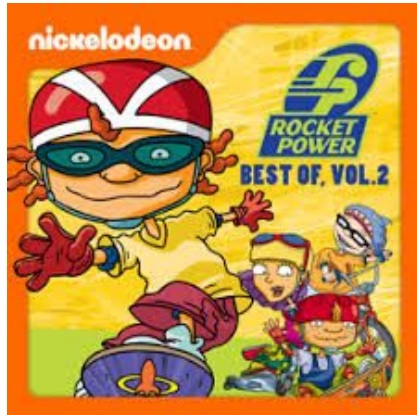


# LONG-RUN COSTS AND ECONOMIES OF SCALE

**10.56- Demonstrate an understanding of long-run costs in the context of economies of scale.**

# KICKOFF:

- ❖ Go to Google Classroom and complete the assignment **“KO-12/11”**
  - Quiz Prep
- ❖ **Roll Call:** Nickelodeon or Cartoon Network?



# ANNOUNCEMENTS:

- ❖ **12/13**- Have through Module 57 read
  - Last module that needs to be read by the test (52 - 57)
- ❖ **12/19**- Unit 4 Test
- ❖ Knight Time this week and next

# CONCEPT CHECK:

- ❖ 15 Questions
- ❖ **ABSOLUTLEY NO TALKING EVEN WHEN YOU'RE DONE**
- ❖ When you are done, Go to Google Classroom and complete the “Economies of Scale” edPuzzle
- ❖ 30 minutes to complete both
  - Once you have completed both, get caught up or ahead on the reading in the textbook (Modules 52 - 57)

# LONG-RUN COSTS AND ECONOMIES OF SCALE

**10.56- Demonstrate an understanding of long-run costs in the context of economies of scale.**

# LONG-RUN V. SHORT-RUN

- ❖ Short run (SR)- at least one input is fixed
- ❖ Long run (LR)- all inputs are variable
- ❖ LRATC- lowest cost per unit at each level of output, assuming all factors are variable

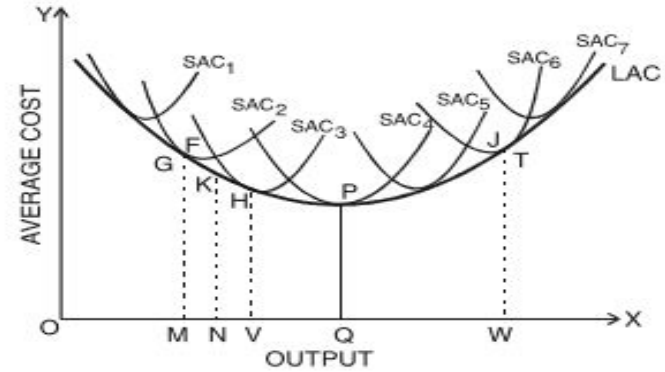
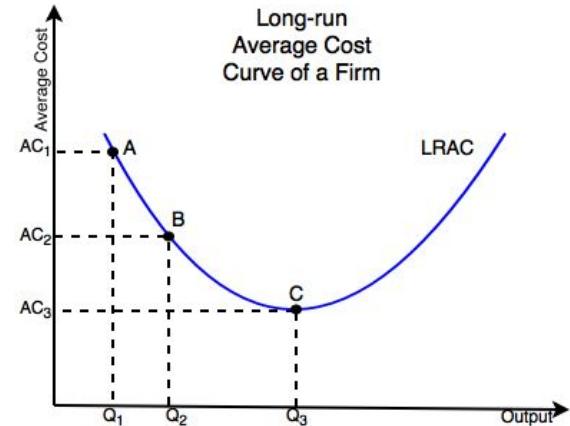
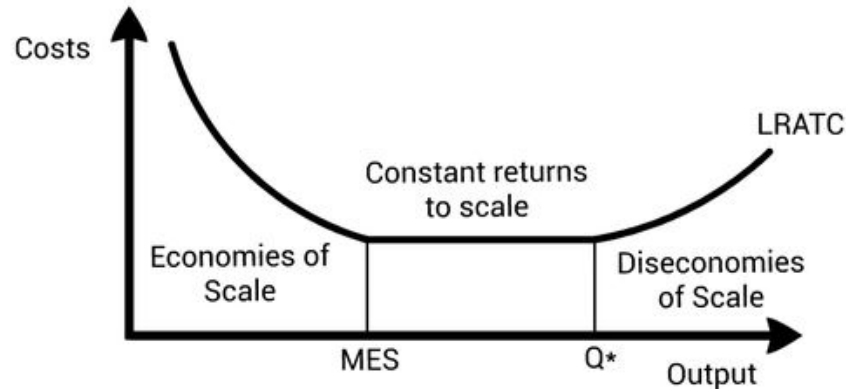


Fig.2 : Long run Average Cost Curves



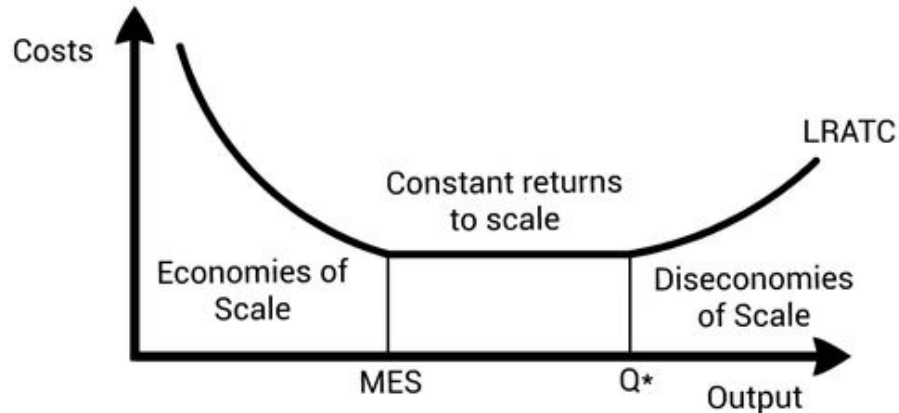
# ECONOMIES OF SCALE V. CONSTANT RETURNS V. DISECONOMIES

- ❖ Economies of Scale- increasing returns to scale
  - Increase in inputs causes a larger increase in output (doubling inputs causes larger than double increase in outputs)
  - LRATC decreases as output increases
    - Curve is downward sloping



# ECONOMIES OF SCALE V. CONSTANT RETURNS V. DISECONOMIES

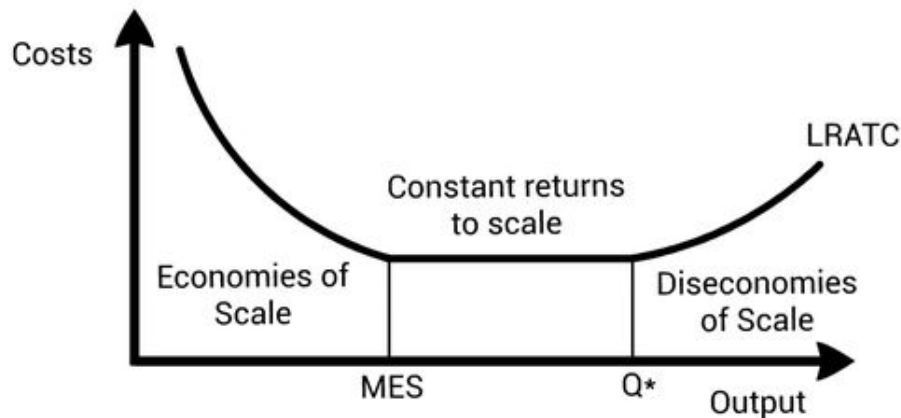
- ❖ Constant Returns to Scale- an increase in input causes an equal increase in output
  - Increase of input by 20% causes an 20% increase in output
  - LRATC is constant as output increases
  - Slope is zero





# ECONOMIES OF SCALE V. CONSTANT RETURNS V. DISECONOMIES

- ❖ Diseconomies of Scale- decreasing returns to scale
  - Increase in inputs causes as lesser increase in outputs (increasing inputs by 50% causes a 25% increase in output)
  - LRATC increases as output increases
  - LRATC curve is upward sloping



# SUNK COST

- ❖ Cost that has already been incurred and therefore should not play into the decision making process
  - To make good decisions you should only look at future benefits and future costs

# SUNK COST EXAMPLE:

- ❖ You project that it will cost you \$150,000 to begin and run your business, and it'll earn you \$200,000 in revenue.
- ❖ However, after spending that \$150,000 you realize it will cost you an additional \$70,000 to start and operate the business.
- ❖ Should you continue spending money to start your business?
- ❖ Yes → If you continue you will lose \$20,000 as opposed to \$150,000

# FREE RESPONSE REVIEW QUESTION

- ❖ Using all the information you've learned the past few classes, complete this FRQ with the person next to you.

# CLOSURE

- ❖ Go to Google Classroom and complete the assignment **“12/11- Closure”**
  - Check for understanding of today's notes
  - Multiple Choice, independent, shouldn't take long