## EconS 101 - Fundamentals of Microeconomics: Things you have to know for Exam 3

## Exam 3 will be on November 19th, 2020 from 1pm to 5pm PST and you must access the exam via Blackboard -

## Things to Know for Exam 3

- 1. A perfectly competitive industry is said to be efficient because the average total cost of production of the industries output is minimized in the long run.
- 2. Monopolistic competition implies a large number of firms producing similar products with relatively easy entry. A good example of a monopolistic competitive industry are restaurants downtown.
- 3. Economist are usually critical of actual monopolies and not so much against natural monopolies that happen due to economies of scale.
- 4. Know the curvature of cost curves! They are u-shaped for a reason. The anatomy of these cost curves do not change unless we assume constant costs per unit.
- 5. Know cost calculations! ATC, AVC, MC, AFC!
- 6. Assuming a firm has no fixed costs implies MC = ATC = AVC = AC and AFC = 0. Note that this will create a flat cost curve.
- 7. Think, can we have a deadweight loss in an industry where a firm choose not to produce because they are either not making any economic profit in the long-run or need to shut down in the short-run?
- 8. Can firms in a perfectly competitive industry be profitable in the short-run? Yes! If demand increases, price increases, quantity output increases, and as long as this is above the  $min\{AVC\}$  the firm will be profitable.
- 9. Typically, producer surplus = profit for firms.
- 10. The shut down condition for a firm is where  $min\{AVC\} > P_C$  where  $P_C$  is then classified as the "shut down price." Shut it down!
- 11. Fixed costs = Total costs when the quantity produced is at 0 (i.e. Q = 0).
- 12. Graphs and tables! Know how to interpret them, and how to use the information they are conveying to you as a reader.
- 13. Pay attention to the hints, as they will help clarify the questions. If you have questions, please do not hesitate to e-mail me.
- 14. Review iClicker Pop Quiz questions!

15. Remember what the words "perfectly competitive industryy in the long-run" mean. Recall that in the long-run a perfectly competitive industry will have new entrants, and that higher industry output will push price and profit back down until it reaches the "break even price" of the firm. This means that in a perfectly competitive industry, the profit maximizing output is the output at which minimizes the ATC curve (i.e. the break even price).

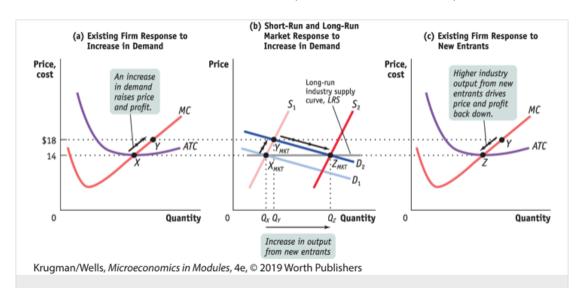


FIGURE 26-3 Comparing the Short-Run and Long-Run Industry Supply Curves

Panel (b) shows how an industry adjusts in the short and long run to an increase in demand; panels (a) and (c) show the corresponding adjustments by an existing firm. Initially the market is at point  $X_{MKT}$  in panel (b), a short-run and long-run equilibrium at a price of \$14 and industry output of O<sub>V</sub>. An existing firm makes zero economic profit, operating at point X in panel (a) at minimum average total cost. Demand increases as D<sub>1</sub> shifts rightward to D<sub>2</sub> in panel (b), raising the market price to \$18. Existing firms increase their output, and industry output moves along the short-run industry supply curve  $S_1$  to a shortrun equilibrium at  $Y_{MKT}$ . Correspondingly, the existing firm in panel (a) moves from point X to point Y. But at a price of \$18 existing firms are profitable. As shown in panel (b), in the long run new entrants arrive and the short-run industry supply curve shifts rightward, from  $S_1$  to  $S_2$ . There is a new equilibrium at point  $Z_{MKT}$ , at a lower price of \$14 and higher industry output of QZ. An existing firm responds by moving from Y to Z in panel (c), returning to its initial output level and zero economic profit. Production by new entrants accounts for the total increase in industry output,  $Q_Z - Q_X$ . Like  $X_{MKT}$ ,  $Z_{MKT}$  is also a short-run and long-run equilibrium: with existing firms earning zero economic profit, there is no incentive for any firms to enter or exit the industry. The horizontal line passing through  $X_{MKT}$  and  $Z_{MKT}$ , LRS, is the long-run industry supply curve: at the break-even price of \$14, producers will produce any amount that consumers demand in the long run.