

McMaster University Department of Economics  
ECON 2P03  
Spring 2014

**Midterm Test #2**

Tuesday June 3, 2014

1:00 – 2:30

H Holmes

**INSTRUCTIONS:**

Answer all questions on the scan sheet.

Hand in scan sheet and question paper separately.

**TOTAL MARKS AVAILABLE: 30**

NAME: \_\_\_\_\_

STUDENT #: \_\_\_\_\_

**Scenario 1**

The following is a list of CHL Memorial Cup winners for the past 20 years. There are 60 teams currently in the CHL.

1994 Kamloops Blazers  
1995 Kamloops Blazers  
1996 Granby Predateurs  
1997 Hull Olympiques  
1998 Portland Winter Hawks  
1999 Ottawa 67's  
2000 Rimouski Oceanic  
2001 Red Deer Rebels  
2002 Kootenay Ice  
2003 Kitchener Rangers  
2004 Kelowna Rockets  
2005 London Knights  
2006 Quebec Remparts  
2007 Vancouver Giants  
2008 Spokane Chiefs  
2009 Windsor Spitfires  
2010 Windsor Spitfires  
2011 Saint John Sea Dogs  
2012 Shawinigan Cataractes  
2013 Halifax Mooseheads

1. **Refer to Scenario 1.** What is the HHI for the CHL?
  - a. 1.00
  - b. .60
  - c. .06
  - d. .05
  
2. **Refer to Scenario 1.** What is the value of the HHI if the CHL is perfectly balanced?
  - a. 1.00
  - b. 0
  - c. .50
  - d. .05

**Scenario 2**

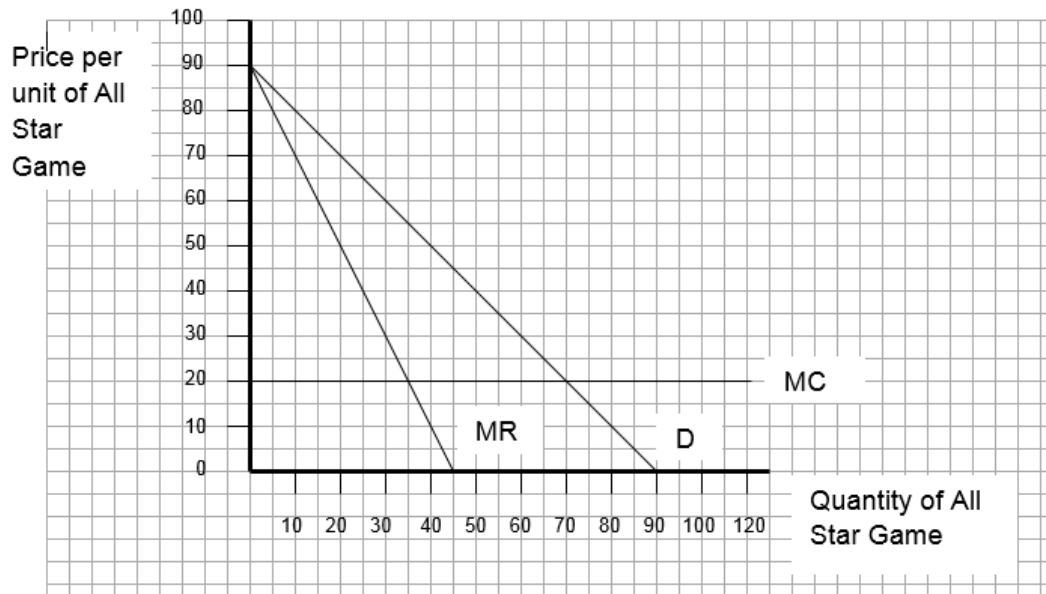
The following are the game winning statistics for an 8 team volleyball league this season. Each week each team plays 1 game; the league's season is 16 weeks.

TEAM	WINS
Ancaster Animals	10
Binbrook Bears	6
Corktown Cougars	9
Dundas Dinos	7
East End Eagles	11
Flamborough Falcons	5
Mountain Marlins	3
Westdale Wolverines	13

3. **Refer to Scenario 2.** What is the actual standard deviation of wins in the league? (Keep 3 decimal places and allow for rounding error)
  - a. .038
  - b. .195
  - c. .001
  - d. None of the above
  
4. **Refer to Scenario 2.** What is the ideal standard deviation of wins in the league?
  - a. .0625
  - b. .125
  - c. .500
  - d. None of the above
  
5. **Refer to Scenario 2.** Which statement is correct?
  - a. The standard deviation of winning percentage is .195 times what it would be if all teams were equally balanced.
  - b. The standard deviation of winning percentage is .125times what it would be if all teams were equally balanced.
  - c. The standard deviation of winning percentage is 1.56 times what it would be if all teams were equally balanced.
  - d. The standard deviation of winning percentage is 4.00 times what it would be if all teams were equally balanced.
  
6. **Refer to Scenario 2.** In the previous season, the standard deviation of win percentage for the league was .203. Which statement is correct?
  - a. The league is more competitively balanced this season than the previous season.
  - b. The league is less competitively balanced this season than the previous season.
  - c. We cannot compare competitive balance using only the standard deviation value.
  - d. None of the above.

**Scenario 3**

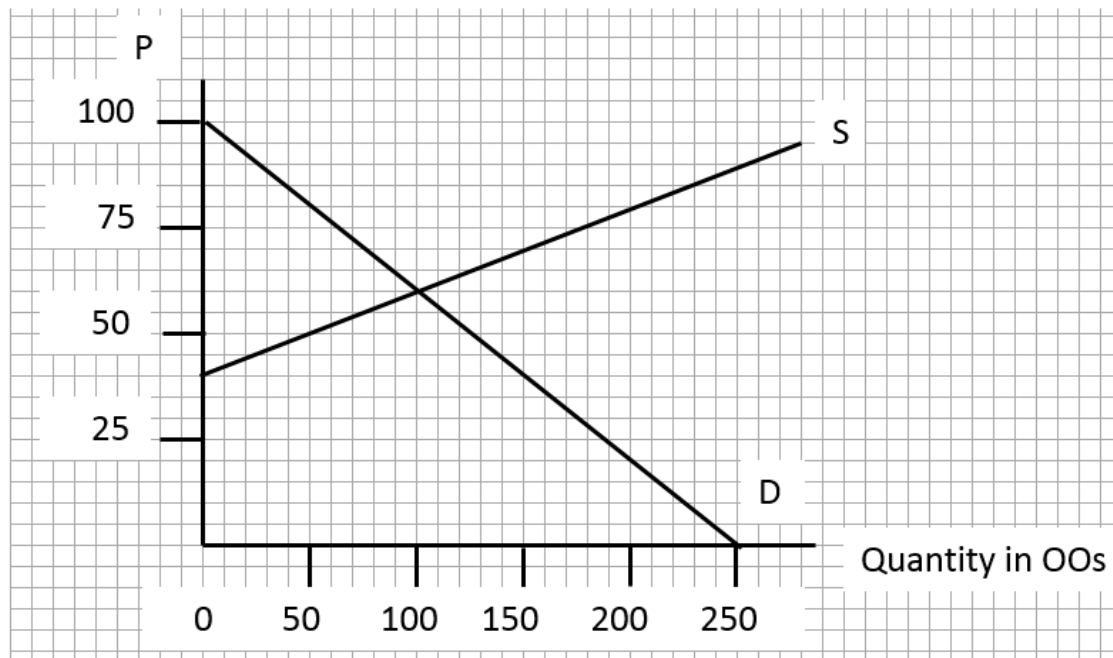
The MLB All Star Game 2015 is up for grabs. The package includes not only the game itself but also the Home Run Derby, celebrity game and various fan appreciation events. If the entire event were divisible, the following curves depict the demand for different quantities of the event at different prices plus the marginal cost of holding the event.



7. **Refer to Scenario 3.** If the All Star Event was divisible, how much of the event and at what price would the league sell?
  - a. 45 units at \$45
  - b. 70 units at \$20
  - c. 30 units at \$60
  - d. 35 units at \$55
  
8. **Refer to Scenario 3.** Suppose the league stipulated that the host city buy 70 units of the event at a price of \$60. Would a host city “buy” the event?
  - a. yes; consumer surplus would be zero
  - b. yes; consumer surplus would be \$450
  - c. no; consumer surplus would be -\$350
  - d. no; consumer surplus would be zero
  
9. **Refer to Scenario 3.** Suppose instead the league stipulated that the host city buy 80 units of the event. What is the highest price per unit of the event the league could charge and still see a host city “buy” all 80 units?
  - a. \$40
  - b. \$50
  - c. \$35
  - d. \$60

**Scenario 4**

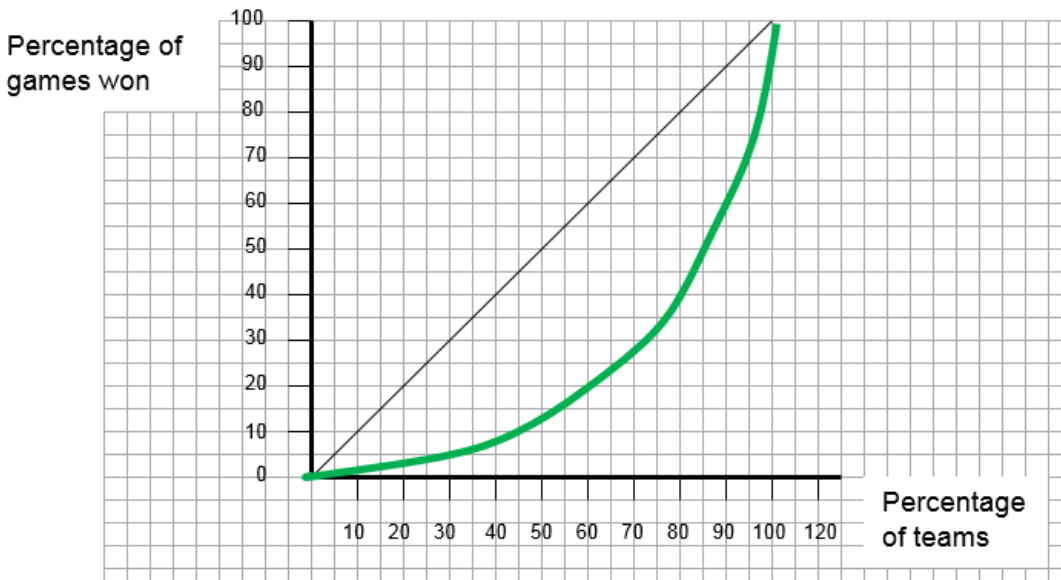
The following diagram depicts demand and supply for tickets to the PanAm Games Opening Ceremonies in Toronto in 2015. The organizers have determined that there is a positive spillover from hosting the games and have estimated the external benefit of the opening ceremonies to be \$45 per attendee.



10. **Refer to Scenario 4.** What is the market quantity of tickets sold?
  - a. 10000 too many considering the externality
  - b. 15000 when the externality is accounted for
  - c. 10000, too few considering the externality
  - d. 5000 when the externality is accounted for
11. **Refer to Scenario 4.** What is the optimal quantity of tickets once the externality has been accounted for?
  - a. 10000
  - b. 18000
  - c. 15000
  - d. 5000
12. **Refer to Scenario 4.** What could the local government do if it wanted to ensure that the socially optimal number of tickets were sold at the best price possible for consumers?
  - a. tax the organizers \$45 per ticket
  - b. subsidize consumers \$45 per ticket
  - c. tax consumers \$45 per ticket
  - d. subsidize the organizers \$45 per ticket

**Scenario 5**

The following diagram depicts the percentage of games won by 30 teams in an 80 games/team season:



13. **Refer to Scenario 5.** How many games are played during the season?
  - a. 2400
  - b. 1200
  - c. 800
  - d. 750
14. **Refer to Scenario 5.** How many teams won a combined (cumulative) total of 240 games? (Round down to the nearest integer if necessary).
  - a. 5
  - b. 9
  - c. 13
  - d. 18
15. **Refer to Scenario 5.** What might be a possible Gini Coefficient value for this scenario?
  - a. .90
  - b. .45
  - c. .25
  - d. .10
16. **Refer to Scenario 5.** What would be the Gini Coefficient value for this scenario if there was perfect competitive balance?
  - a. .5
  - b. 1
  - c. 0
  - d. None of the above

17. A linear Lorenz curve
  - a. indicates a Gini coefficient equal to 1
  - b. becomes steeper the greater the competitive imbalance
  - c. indicates perfect competitive balance
  - d. becomes flatter the greater the competitive imbalance
18. The marginal propensity to consume for Winnipeg is .7. With the return of the Jets, the team has spent \$6.3-million on salaries for local arena employees. The total impact of this new spending is
  - a. \$6.3-million
  - b. less than \$6.3-million since many employees live outside the area
  - c. \$21-million
  - d. None of the above
19. When Western New Yorkers attend Toronto Blue Jays home games
  - a. Western NY is importing baseball
  - b. Toronto is importing baseball
  - c. Western NY is exporting baseball
  - d. sports is not a proper good so it cannot be imported or exported
20. Which of the following are all steps taken by one or more major sports leagues to promote competitive balance?
  - a. revenue sharing, salary negotiations, setting the rules
  - b. reverse-order draft, salary caps, schedule adjustments
  - c. luxury taxes, promotion and regulation, salary negotiations
  - d. setting the rules, salary caps, reverse-order draft
21. One reason a draft lottery may be superior to a straightforward reverse entry draft is
  - a. it may discourage tanking by weak teams
  - b. it is more fair to stronger teams
  - c. teams do not have to identify talent as precisely
  - d. none of the above
22. Which league has the highest salary cap level?
  - a. NFL
  - b. NHL
  - c. MLB
  - d. NBA
23. Which of the leagues listed is the most competitively imbalanced?
  - a. NFL
  - b. NHL
  - c. MLB
  - d. NBA
24. If a league is perfectly competitively balanced in a season, we would expect that the standard deviation of team win percentages around the league average would be:
  - a. 0
  - b. .500
  - c. 1.00
  - d. None of the above.

25. What is the economic reason that teams do not stockpile star players?
  - a. increasing total costs
  - b. increasing marginal cost
  - c. diminishing marginal product
  - d. Both b and c
  
26. The *ego premium* is
  - a. the additional money spent by a fan to buy better seats
  - b. the inflated price someone will pay to acquire a team because it makes them feel special
  - c. the inflated signing bonus an owner will pay to acquire a superstar player
  - d. the additional salary demanded by a free agent to re-sign with a team
  
27. Governments may want to subsidize professional sports for which of the following reasons?
  - a. to prevent free-riders
  - b. to compensate for negative externalities
  - c. to stop a team from leaving a city
  - d. all of the above
  
28. The International Olympic committee awarded the 2016 Summer Olympic Games to Rio. This is an example of
  - a. vertical equity
  - b. horizontal equity
  - c. all-or-nothing demand
  - d. none of the above
  
29. The Coase Theorem predicts that
  - a. it is in the best interest of a team to trade players for draft order position
  - b. free agents will be less productive than drafted players
  - c. the cost of negotiating a player's salary impacts where the player will play
  - d. players will go to the team where they are most productive
  
30. The civic infrastructure period of stadium building lasted between what years?
  - a. 1850 - 1890
  - b. 1890 -1930
  - c. 1953 -1980
  - d. 1980 - present day