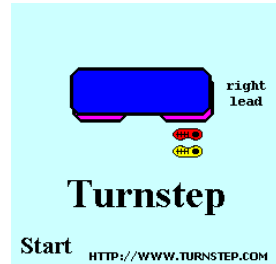


Backward Bending Labor Supply Curves



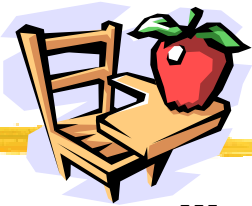
Game Rules

- ❖ **Divide yourself into six groups of 6 to 7 students.**
- ❖ **1 representative from each group has to do the turn step exercise.**



- Let us have a game. Divide yourself into six groups of six to seven students. I have a task for you. I want one representative from each group to do a turn step exercise.
- Put two chairs side by side and demonstrates to students how to do and count a turn-step (please refer to turnstep.html for illustration. One completed turn-step means the student finishes at where he/she starts).

Game Rules



- ❖ **Move your desks aside, each group will need 2 chairs for this exercise**
- ❖ **For safety reason, at least 2 students should hold the chairs.**
- ❖ **After 2 minutes practicing, choose the strongest person for this task.**

•Now, quietly move your desks aside, each group should have two chairs for this exercise and at least 2 students to hold the chairs for safety reason. I will now give you two minutes to have some practice. After practicing, choose the strongest person for this task.

Game Rules

- ❖ **Other team members:**
 - ✓ **1 student counts the no. of turn-step teammate has done**
 - ✓ **1 student reports the no. of turn-steps to teacher**

 - ✓ **the other monitor another group**
 - ✓ **the 7th member can be your team's helper whenever it is needed.**

- ❖ **Group 1's monitor will monitor Group 2 and Group 2's monitor will monitor Group 3 and so on.**

•(After two minutes) So, each group should have two persons holding the chairs and one representative to do the turn-step. What about the other 3 to 4 team members? I want one student to count the no. of turn-step your teammate has done; one student to report the no. of steps to me and the other to be the monitor of another group, to make sure the other group's representative is doing every step correctly and reporting the right no. Should you have the 7th member in the team, please be your team's helper whenever it is needed.

•OK, I want everyone who is the monitor to go to other group. Group 1's monitor please go to Group 2 and be their monitor. Group 2's to Group 3 and so on.

Game Rules

❖ You will have **1 minute** to do the turn-step.

❖ For every turn-step your teammate has done, your group **gets 1 bonus point**.

❖ At the end of the lesson, the group with the highest score can get a prize.



•Now, I give you one minute to do the step-up. For every step-up your teammate has done, your group gets one bonus point. At the end of the lesson, your group can buy any of these items (show students all the wrapped prizes, please refer the session “Tools” for details) with the point you earn.

Time to Start!



•Ask students to get ready and say “Go”. Keep time for one minute. Then ask each group to report the no. and cross check with every monitor. Record down the no. on Table 1. (Don’t show the Table 1 to students now because students should not know how many rounds you will play.)

Time's Up!



Game Rules



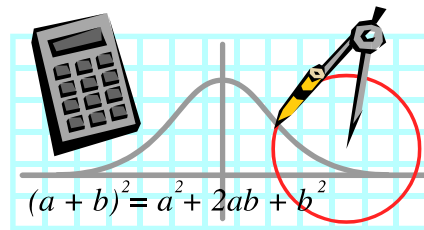
- ❖ **In the 2nd round, you can get 2 bonus points for one turn-step.**
- ❖ **You cannot change your representative.**
- ❖ **You will have 1 minute for this round.**

•Do you want to earn more bonus points? This time, you can get two bonus points for one step-up, but you cannot change your representative.

•Say “Go” and keep time for one minute. Then ask each group to report the no. and cross check with every monitor. Record down the no. on Table 1. Teacher can give them more rounds to do the step-up. Add one more bonus point in each round until you observe a decline in the number of turn-step done. Students have to keep using the same representatives in every round. Most importantly, do not let students know how many rounds you decide to play.

Game Rules

- ❖ **Plot a curve to show the relationship between the number of turn-step done by their group and the bonus point per turn-step on the paper.**



- After finishing all rounds, each group will be given an A3 sized paper with Diagram1 drawn on it already and a marker.
- Project Table1 on board. Distribute each group an A3 sized paper with Diagram1 drawn on it already and a marker. Ask them to plot a curve to show the relationship between the number of step-up done by their group and the bonus point per step-up on the paper.
- Ask each group to post its diagram on board.

Individual labor supply curve

- ❖ **Normally, an individual labor supply curve should be backward bending:**
 - ✓ **Substitution effect**
 - ✓ **Income effect**

- ❖ **A market labor supply curve is the summation of each group's individual labor supply curves.**

•Teacher now explains to students that this curve can be seen as an individual labor supply curve. Bonus point is wage; number of step-up is number of working hour an individual is willing and able to supply under certain wage level. Normally, the curve should be backward bending, and then teacher can explain the reason behind. Explain also the substitution and income effects.

•After introducing the backward bending individual labor supply curve, teacher can draw a market labor supply curve i.e., the summation of each group's individual labor supply curves on board (refer to Diagram 2).

Lesson recap



- ❖ **Why the labor supply curve is a backward bending curve instead of a straight line?**
- ❖ **What effect dominates in the upward-sloping part of an individual labor supply curve?**
- ❖ **What effect dominates in the downward-sloping part of an individual labor supply curve?**
- ❖ **Is the shape of market labor supply curve different from the individual labor supply curves? Why?**

Time to Present Prizes



- At the end of the lesson, each group can use their bonus points to buy prize(s) from teacher.