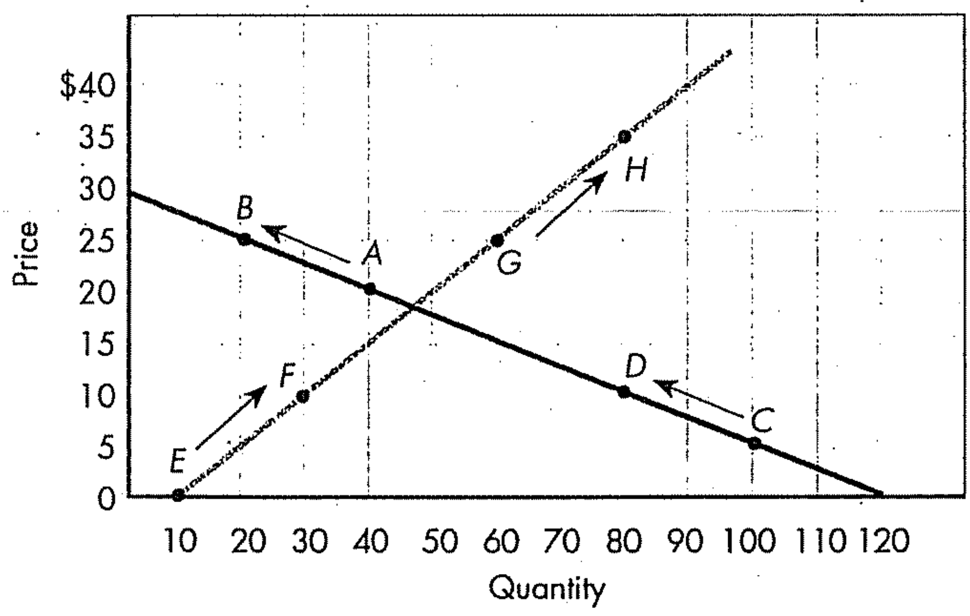
İKT 103 **Ödev 5**

18. When the price of ketchup rises by 15 percent, the demand for hot dogs falls by 1 percent. (*LO6-4*)
    a. Calculate the cross-price elasticity of demand.
    b. Are the goods complements or substitutes?
    c. In the original scenario, what would have to happen to the demand for hot dogs for us to conclude that hot dogs and ketchup are substitutes?

19. Calculate the income elasticities of demand for the following: (*LO6-4*)
    a. Income rises by 20 percent; demand rises by 10 percent.
    b. Income rises from $30,000 to $40,000; demand increases (at a constant price) from 16 to 19.

6. Calculate the elasticity of the designated ranges of supply and demand curves on the following graph. (*LO6-1*)



2. Peggy-Sue's cookies are the best in the world, or so I hear. She has been offered a job by Cookie Monster, Inc., to come to work at $125,000 per year. Currently, she is producing her own cookies, and she has revenues of $260,000 per year. Her costs are $40,000 for labor, $10,000 for rent, $35,000 for ingredients, and $5,000 for utilities. She has $100,000 of her own money invested in the operation, which, if she leaves, can be sold for $40,000 that she can invest at 10 percent per year. *(LO11-1)*
   a. Calculate her accounting and economic profits.
   b. Advise her as to what she should do.

4. What distinguishes the short-run from the long run? *(LO11-2)*
5. What is the difference between marginal product and average product? *(LO11-2)*
6. Explain how studying for an exam is subject to the law of diminishing marginal productivity. *(LO11-2)*
7. Find *TC*, *AFC*, *AVC*, *AC*, and *MC* from the following table. *(LO11-3)*

Units	*FC*	*VC*
0	$100	$ 0
1	100	40
2	100	60
3	100	70
4	100	85
5	100	130

14. If marginal cost is increasing, what do we know about average cost? *(LO11-4)*

15. A firm has fixed costs of $100 and variable costs of the following: *(LO11-4)*

Output	1	2	3	4	5	6	7	8	9
Variable costs	$35	75	110	140	175	215	260	315	390

a. Show *AFC, ATC, AVC,* and *MC* in a table.
b. Graph the *AFC, ATC, AVC,* and *MC* curves.
c. Explain the relationship between the *MC* curve and the *AVC* and *ATC* curves.
d. Say fixed costs dropped to $50. Which curves shifted? Why?

16. If average productivity falls, will marginal cost necessarily rise? How about average cost? *(LO11-4)*