



IB Economics: [www.IBDeconomics.com](http://www.IBDeconomics.com)

### 1.2 SUPPLY <sup>HL</sup>: STUDENT LEARNING ACTIVITY

Answer the questions that follow.

#### 1. HIGHER LEVEL PAPER 3 QUESTIONS

16. In the demand function:  $Q_s = c + dP$ , explain what the following variables represent: **[4 marks]**

- i.  $Q_s$
- ii.  $P$
- iii.  $c$
- iv.  $+d$

17. Explain why the variable 'd' is a positive number?

**[2 marks]**

18. For the supply function:  $Q_s = -20 + 10P$ :

**[10 marks]**

- a. Plot the graph.
- b. When  $P = 3, 4$  and  $6$ , state the values of  $Q_s$ .
- c. Determine the horizontal and vertical intercepts.

19. From the initial supply function  $Q_s = -20 + 10P$ , new technology results in 10 more units being supplied at each price.

**[10 marks]**

- a. Plot the new graph alongside your answer to Q18 above.
- b. Determine the new supply function.
- c. Determine the horizontal and vertical intercepts.

20. From the initial supply function  $Q_s = -20 + 10P$ , increased costs of production results in 15 less units being supplied at each price. **[10 marks]**

- Plot the new graph alongside your answer to Q18 above.
- Determine the new supply function.
- Determine the horizontal and vertical intercepts.

21. For the supply function  $Q_s = -20 + 10P$ :

**[10 marks]**

- Identify the slope of the supply curve.
- Determine the new supply function when the slope of the supply curve changes to 15.
- Show how the supply curve changes when the slope of the supply curve changes to 15.
- Determine the horizontal and vertical intercepts when the slope of the supply curve changes to 15.

22. Consider the supply function  $Q_s = -20 + 10P$ .

**[10 marks]**

- Outline how the change in slope affects the steepness of the supply curve. If the slope changes to +8.
- Show how the supply curve will change.
- Determine the new supply function.

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