



Analytical Entrance Examination (Sample)
College of Management
Mahidol University

Part I: Logical Inference

1. “By starting an alliance with Fordham Inc., the Baker Group is reducing its reliance on the construction business. The alliance may lead to growth in the sanitary ware industry.” Which of the following can be inferred from the above passage?
 - a. The construction industry is not expanding rapidly.
 - b. Baker Group is in the sanitary ware industry and seeking to expand through the alliance with Fordham Inc.
 - c. Sanitary ware companies are keen to move into the construction industry.
 - d. Fordham Inc. is in the construction industry.
 - e. None of the above

2. “In winning the battle to acquire Major Inc., the Sloan Group Inc. is reducing its reliance on the hotel business. The \$15 billion deal may spur more takeover activity in the entertainment industry.” Which of the following can be inferred from the above passage?
 - a. The entertainment industry is expanding.
 - b. Major Inc. is in the hotel business.
 - c. Hotel companies are keen to move into entertainment industry.
 - d. Sloan Group is in the entertainment industry.
 - e. Major Inc. is in the entertainment business.

3. A research report’s findings are as follows: “Tall men earn more than short men with the same level of education and a similar background. There is no significant effect of height on income among women.” What can we conclude from this research?
 - a. Getting a higher education does not really help short men much.
 - b. Short men need to improve their background in order to earn more than tall men.
 - c. There is not much difference in height among women.
 - d. This research is flawed, as it does not find the same effect among men and women.
 - e. Height may partially determine the income of working men.

4. If Nana takes the bus to go to school, then she will be late. Which of the following must definitely be true?
- If Nana does not take the bus, then she will not be late.
 - If Nana takes the BTS, then she will not be late.
 - If Nana is late, then she must have taken the bus.
 - If Nana is not late, then she must have not taken the bus.
 - Being on time is not so important, so Nana takes the bus.
5. The inflow of immigrants in our country depresses the wages paid to low skilled Thai laborers. These people are flooding our country-side and taking jobs that could have been taken by local people. In the end, nobody profits from the presence of these immigrants, except the immigrants themselves, while wages for all low skilled workers in general drop.” Which of the following identifies the greatest flaw in the reasoning above?
- High skilled Thai workers are affected negatively as well.
 - More supply of low skilled labor depresses its wage, given the same demand
 - More supply of low skilled labor may lead investors to open more factories, increasing economic growth as a whole.
 - The police can control illegal immigration, minimizing the effect on wages
 - Low skilled labor is mainly concentrated in the cities, and not on the country-side.

Part II: Numerical Reasoning and Math

6. If x and k are integers and $(12^x)(4^{2x+1}) = (2^k)(3^2)$, what is the value of k ?
- a. 5
 - b. 7
 - c. 10
 - d. 12
 - e. 14
7. On a map Town G is 10 centimeters due east of Town H and 8 centimeters due south of Town J. Which of the following is closest to the straight-line distance, in centimeters, between Town H and Town J on the map?
- a. 6
 - b. 13
 - c. 18
 - d. 20
 - e. 24
8. Employees of a discount appliance store receive an additional 20% off of the lowest price on an item. If an employee purchases a dishwasher during a 15% off sale, how much will he pay if the dishwasher originally cost \$450?
- a. 280.9
 - b. 287
 - c. 292.5
 - d. 306
 - e. 333.89
9. If $5^x - 5^{x-3} = (124)(5^y)$, what is y in terms of x ?
- a. x
 - b. $x - 3$
 - c. $x - 6$
 - d. $2x + 3$
 - e. $2x + 6$
10. If k is negative, which of the following must also be negative?
- a. $1 - k$
 - b. $k + 1$
 - c. $k - 1$
 - d. $(-k)^2$
 - e. $(-1)k$

Part III: Data Sufficiency

Each problem below consists of a question and two statements labeled (1) and (2). You have to decide whether information given is **sufficient** for answering the question. Please choose:

- (1) ALONE** If statement **(1) ALONE** is sufficient, but statement (2) alone is not sufficient to answer the question asked.
- (2) ALONE** If statement **(2) ALONE** is sufficient, but statement (1) alone is not sufficient to answer the question asked.
- BOTH** If **BOTH** statements **(1) and (2) TOGETHER** are sufficient to answer the question, but neither (1) nor (2) alone is sufficient.
- EITHER** If **EACH** statement **ALONE** is sufficient to answer the question asked.
- NEITHER** If statement (1) and (2) **TOGETHER** are **NOT** sufficient to answer the questions asked, and additional information is needed.

1. Each week Connie receives a base salary of \$500, plus a 20 percent commission on the total amount of her sales that week in excess of \$1,500. What was the total amount of Connie's sales last week?

- (1) Last week Connie's base salary and commission totaled \$1,200.
(2) Last week Connie's commission was \$700.

- a. (1) ALONE
b. (2) ALONE
c. BOTH
d. EITHER
e. NEITHER

2. John left home 30 minutes after Peter, and John left home 20 minutes before Joe. What time did Joe leave the house?

- (1) John left with a delay of 20 minutes.
(2) Peter left at 8.30am.

- a. (1) ALONE
b. (2) ALONE
c. BOTH
d. EITHER
e. NEITHER

3. In a telephone poll, 600 people were asked if they were in favor, against, or undecided on a bill being debated in the legislature. *How many people polled were in favor of the bill?*
- (1) The number of people in favor of the bill was 200 greater than the number of people against it.
- (2) Two hundred people were undecided, which was twice as many as the number against the bill.
- a. (1) ALONE
b. (2) ALONE
c. BOTH
d. EITHER
e. NEITHER
4. If J, S, and V are points on the number line, what is the distance between S and V?
- (1) The distance between J and S is 20.
(2) The distance between J and V is 25.
- a. (1) ALONE
b. (2) ALONE
c. BOTH
d. EITHER
e. NEITHER
5. Some computers at a certain company are Brand X and the rest are Brand Y. If the ratio of the number of Brand Y computers to the number of Brand X computers at the company is 5 to 6, how many of the computers are Brand Y?
- (1) There are 80 more Brand X computers than Brand Y computers at the company.
(2) There is a total of 880 computers at the company.
- a. (1) ALONE
b. (2) ALONE
c. BOTH
d. EITHER
e. NEITHER