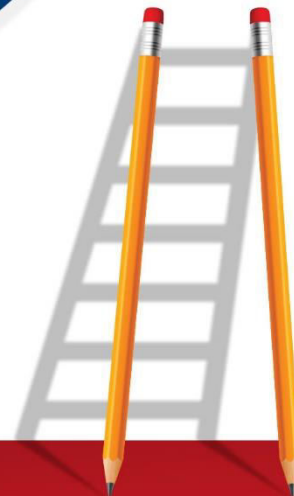


Logical Reasoning



Worksheet-2



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Worksheet-2**Logical Problems**

DIRECTION: Each problem consists of three statements. Based on the first two statements, the third statement may be true, false, or uncertain.

Q.1

Apartments in the Riverdale Manor cost less than apartments in The Gaslight Commons. Apartments in the Livingston Gate cost more than apartments in the The Gaslight Commons.

Of the three apartment buildings, the Livingston Gate costs the most.

If the first two statements are true, the third statement is

- A) True
- B) False
- C) Uncertain

Q.2

Mara runs faster than Gail.

Lily runs faster than Mara.

Gail runs faster than Lily.

If the first two statements are true, the third statement is

- A) True
- B) False
- C) Uncertain

Q.3

Blueberries cost more than strawberries.

Blueberries cost less than raspberries.

Raspberries cost more than strawberries and blueberries.

If the first two statements are true, the third statement is

- A) True
- B) False
- C) Uncertain

DIRECTION: Read the question carefully and choose the correct answer.

Q.4

Nurse Kemp has worked more night shifts in a row than Nurse Rogers, who has worked five. Nurse Miller has worked fifteen night shifts in a row, more than Nurses Kemp and Rogers

combined. Nurse Calvin has worked eight night shifts in a row, less than Nurse Kemp. How many night shifts in a row has Nurse Kemp worked?

- A) Eight
- B) Nine
- C) Ten
- D) Eleven

Q.5

The high school math department needs to appoint a new chairperson, which will be based on seniority. Ms. West has less seniority than Mr. Temple, but more than Ms. Brody. Mr. Rhodes has more seniority than Ms. West, but less than Mr. Temple. Mr. Temple doesn't want the job. Who will be the new math department chairperson?

- A) Mr. Rhodes
- B) Mr. Temple
- C) Ms. West
- D) Ms. Brody

Q.6

Danielle has been visiting friends in Ridgewood for the past two weeks. She is leaving tomorrow morning and her flight is very early. Most of her friends live fairly close to the airport. Madison lives ten miles away. Frances lives five miles away, Samantha, seven miles. Alexis is farther away than Frances, but closer than Samantha. Approximately how far away from the airport is Alexis?

- A) Nine miles
- B) Seven miles
- C) Eight miles
- D) Six miles

DIRECTION: Read the following information carefully and answer the question given below.

Q.7

Fact 1: Robert has four vehicles.

Fact 2: Two of the vehicles are red.

Fact 3: One of the vehicles is a minivan.

If the first three statements are facts, which of the following statements must also be a fact?

I: Robert has a red minivan.

II: Robert has three cars.

III: Robert's favorite color is red.

A) I only

B) II only

C) II and III only

D. None of the statements is a known fact.

Q.8

Fact 1: All hats have brims.

Fact 2: There are black hats and blue hats.

Fact 3: Baseball caps are hats.

If the first three statements are facts, which of the following statements must also be a fact?

I: All caps have brims.

II: Some baseball caps are blue.

III: Baseball caps have no brims.

A) I only

B) II only

C) II and III only

D) None of the statements is a known fact.

Q.9

Fact 1: Jessica has four children

Fact 2: Two of the children have blue eyes and two of the children have brown eyes.

Fact 3: Half of the children are girls.

If the first three statements are facts, which of the following statements must also be a fact?

I: At least one girl has blue eyes.

II: Two of the children are boys.

III: The boys have brown eyes.

A) I only

B) II only

C) II and III only

D) None of the statements is a known fact.

Q.10

Fact 1: Pictures can tell a story.

Fact 2: All storybooks have pictures.

Fact 3: Some storybooks have words.

If the first three statements are facts, which of the following statements must also be a fact?

I: Pictures can tell a story better than words can.

II: The stories in storybooks are very simple.

III: Some storybooks have both words and pictures.

A) I only

B) II only

C) III only

D) None of the statements is a known fact.

ANSWER KEY (Worksheet-2)

1	A	6	D
2	B	7	D
3	A	8	D
4	B	9	B
5	A	10	C

ANSWERS EXPLAINED**Q.1 Correct Answer A:**

Since the Gaslight Commons costs more than the Riverdale Manor and the Livingston Gate costs more than the Gaslight Commons, it is true that the Livingston Gate costs the most.

Q.2 Correct Answer B:

We know from the first two statements that Lily runs fastest. Therefore, the third statement must be false.

Q.3 Correct Answer A:

Because the first two statements are true, raspberries are the most expensive of the three.

Q.4 Correct Answer B:

Nurse Kemp has worked more shifts in a row than Nurse Calvin; therefore, Kemp has worked more than eight shifts. The number of Kemp's shifts plus the number of Rogers's shifts (five) cannot equal fifteen or more, the number of Miller's shifts. Therefore, Kemp has worked nine shifts in a row ($5 + 9 = 14$).

Q.5 Correct Answer A:

Mr. Temple has the most seniority, but he does not want the job. Next in line is Mr. Rhodes, who has more seniority than Ms. West or Ms. Brody.

Q.6 Correct Answer D:

Alexis is farther away than Frances, who is five miles away, and closer than Samantha, who is seven miles away.

Q.7 Correct Answer D:

There is not enough information to support any of the statements. Robert is known to have a minivan, but it is not known which of his vehicles is red. Robert may have a pickup or sport utility vehicle, so the second statement cannot be supported. There is no way to know if Robert's favorite color is red (statement III).

Q.8 Correct Answer D:

All baseball caps have brims, since baseball caps are hats (Fact 3) and all hats have brims (Fact 1). This rules out statement III, but it doesn't follow that all caps, a category that may include caps that are not baseball caps, have brims (statement I). Statement II cannot be confirmed, either, since it is possible, given the information, that all baseball caps are black.

Q.9 Correct Answer B:

Since one-half of the four children are girls, two must be boys. It is not clear which children have blue or brown eyes.

Q.10 Correct Answer C:

Statements I and II are not supported by the facts. Statement III is true because if all story-books have pictures and only some have words, then some storybooks have both words and pictures.

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