

NAME: _____

P.I. G.G.25: Know and apply the conditions under which a compound statement (conjunction, disjunction) is true

1. Assume the statement "Michael is taking sociology and biology" is true. Which of the following statements must be true?
[A] Michael is taking both sociology and biology.
[B] Michael is taking neither sociology, nor biology.
[C] Michael is taking only sociology.
[D] Michael is taking only biology.
2. Assume the statement "Cheryl is taking fencing or sculpture" is true. Which of the following statements must be false?
[A] Cheryl is taking only sculpture.
[B] Cheryl is taking neither fencing, nor sculpture.
[C] Cheryl is taking both fencing and sculpture.
[D] Cheryl is taking only fencing.
3. Assume the statement "James is taking drama and physics" is true. Which of the following statements must be true?
[A] James is taking both drama and physics.
[B] James is taking only drama.
[C] James is taking neither drama, nor physics.
[D] James is taking only physics.

4. Assume the statement "James is taking history or tennis" is true. Which of the following statements must be false?
[A] James is taking only tennis.
[B] James is taking neither history, nor tennis.
[C] James is taking only history.
[D] James is taking both history and tennis.
5. Assume the statement "James is taking drama and physics" is true. Which of the following statements must be true?
[A] James is taking both drama and physics.
[B] James is taking only physics.
[C] James is taking only drama.
[D] James is taking neither drama, nor physics.
6. Assume the statement "Pamela is taking music or physics" is true. Which of the following statements must be false?
[A] Pamela is taking only music.
[B] Pamela is taking only physics.
[C] Pamela is taking neither music, nor physics.
[D] Pamela is taking both music and physics.

[1] A

[2] B

[3] A

[4] B

[5] A

[6] C