

Math 131 - Dr. Miller - Activity #3: Synonyms for “If-then”

Underline the hypothesis portion of each statement below. Then rewrite the entire conditional statement in the form(s) requested. (You may have to tweak the English grammar in some cases, to sound smoother.)

1. The number a^2 is even if a is even. (Underline the hypothesis.)

Write using “sufficient”:

2. a and b having opposite signs implies that $|a + b| < |a| + |b|$. (Underline the hypothesis.)

Write in “only if” form:

3. a^2 can only be a multiple of b^2 if a is a multiple of b . (Underline the hypothesis.)

Write using “implies”:

4. $a^3 < b^3$ is a necessary condition for a to be less than b . (Underline the hypothesis.)

Write in “if-then” form:

5. $a < b$ and $c > 0$ are sufficient conditions for ac to be less than bc . (Underline the hypothesis.)

Write using a trailing “if”: