

IG-Day 5

LOGIC

Math sentences statement of fact

Closed Sentence

Truth Value

Ex 1) Every triangle has three sides.

T

Ex 2) Madrid is 50 miles from Canton.

F

Ex 3) $5 \cdot 2 = 10$

T

Counter examples

Ex) Go do your homework. - This is a command not a statement

Ex) Are the Yankees going to win the World Series?
- This is a question not a statement

Open Sentence - an open sentence contains a variable

Variable

Ex 1) They are going to Brad's house.

They

Ex 2) She is my sister.

She

Ex 3) $2x + 9 = 15$

x

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Logic and Symbols

Symbol

Statement

Truth Value

p: MW's school colors are blue and gold

T

\sim p: MW school colors are not blue and gold

F

or It is not the case that MW school colors are blue and gold

q: Smoking is healthy for you.

F

\sim q: Smoking is not healthy for you

T

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