

## Quiz 1 VA

1. Classify the following numbers as RATIONAL, IRRATIONAL, INTEGER, or WHOLE. Note that some numbers might fit more than one category. YOU MUST NAME EVERY CATEGORY THE NUMBER FITS IN!
- a. -51.242424...      **RATIONAL**
  - b. 0.9923              **RATIONAL**
  - c. 7                      **RATIONAL, WHOLE, INTEGER**
  - d.  $\pi$                     **IRRATIONAL**
  - e. -1                     **RATIONAL, INTEGER**
  - f. 0                      **RATIONAL, WHOLE, INTEGER**
  - g.  $3/7$                  **RATIONAL**
2. Write the set notation representation for the Natural Numbers (Counting Numbers). Remember: Set notation means { set members }

**{1, 2, 3, ...}**

3. Write the truth table for “**p AND q**”.

<b>p</b>	<b>q</b>	<b>p AND q</b>
<b>T</b>	<b>T</b>	<b>T</b>
<b>T</b>	<b>F</b>	<b>F</b>
<b>F</b>	<b>T</b>	<b>F</b>
<b>F</b>	<b>F</b>	<b>F</b>

4. Circle the items below that are propositions: (**PROPOSITIONS IN RED \*\*P\*\***)
- a. “Put down your fork.”
  - b. “I spent nearly”
  - c.  **$1+5=15$  (“One plus five equals fifteen.”) \*\*P\*\***
  - d. **“Suzuki is a Japanese family name.” \*\*P\*\***
  - e. “Why did you do that?”
  - f. **“Rachael Calgary is not a member of this class.” \*\*P\*\***
  - g. **“Jason is a police officer and Boston is a city in Massachusetts.” \*\*P\*\***
5. Which of the following symbols means “**OR**”? Circle the correct one.

**∧**      **∨**      -      ~

6. You are given the conditional “If you are living, then you are eating.” Write the CONVERSE of this conditional.
- CONVERSE: **“If you are eating, then you are living.”**