

# Objective #4

## Classify real numbers

1. Name the integers in the set:  $\{23, \sqrt{3}, 3.34, 0, -2.7777, \frac{7}{9}, -3\}$
- Handwritten annotations:* "irrational" with an arrow pointing to  $\sqrt{3}$ ; "rational" with an arrow pointing to 3.34; "rational" with an arrow pointing to  $\frac{7}{9}$ ; "rational" with an arrow pointing to -3. The numbers 23, 0, and -3 are circled in purple.

The integers are 23, 0, -3

2. What is the best classification for -9?

~~[A] irrational number, real number~~

[B] rational number, real number

[C] integer, rational number, real number

~~[D] whole number, integer, real number~~

*Handwritten note:* "more complete" with a bracket under [C]

3. Which of the following is false?

[A] Real numbers are irrational numbers.

[B] The digits are whole numbers from 0 to 9.

[C] Zero is a nonpositive integer.

[D] The set of integers is  $\{\dots, -3, -2, -1, 0, 1, 2, 3, \dots\}$ .

*Handwritten notes:* "True" with a checkmark above [A]; "True" with a checkmark above [D]

4. Name all of the sets of numbers of which 1.6 is an element:

~~natural numbers~~, ~~whole numbers~~, ~~integers~~, rational numbers, ~~irrational numbers~~, real numbers

*Handwritten annotations:* Checkmarks above "rational numbers" and "real numbers"; X marks above "natural numbers", "whole numbers", "integers", and "irrational numbers".