

Algebra 1 G/T: Chapter 1, Part 1

Mrs. Krummel

June 11, 2018

1 Critical Thinking Questions (CTO's) (20 pts)

Answer each question using complete sentences. You may choose to include sketches and/or examples to enhance your explanations. Your written answers must be typed. Sketches may be hand drawn. If you prefer not to build a complete L^AT_EX document, I recommend using Microsoft Word's built-in equation editor or use a L^AT_EX equation editor such as the one found at <http://www.sitmo.com/latex> as needed.

1. Describe a real-world situation that could be represented by the equation $a = b + 3$. Include a definition for each variable.
2. Explain the difference between -3^2 and $(-3)^2$ in terms of order of operations.
3. Describe the relationships between natural, whole, integer, rational, irrational, and real numbers. Give one example and one non-example of each.
4. Is it always possible to find a number in between any two distinct numbers on the real number line? Explain.

(a) $|a - b| = |b - a|$

(b) $|a + b| = |a| + |b|$

(c) $|ab| = |a| \cdot |b|$

2 Textbook Exercises (10 pts)

1-1 p.6-8 # 27, 29, 31, 33, 40

1-2 p.12-15 # 45, 48, 53, 54, 61, 62, 63

1-3 p.20-23 # 42-50, 63, 64, 65, 68-71

1-4 p.27-30 # 80, 82, 86, 89, 92, 94-98

1-5 p.34-36 # 52, 53, 54, 63, 65, 66

1-6 p.41-44 # 60-69, 74, 75, 88-91

3 Additional Exercises (10 pts)