

Math-08 Homework #2

Reading

- Text book section 0.2.

Problems

- 1). Let $A = \{x \in \mathbb{R} \mid -1 \leq x \leq 2\}$
 - a). Is the statement $\forall a \in A, a < 2$ true or false? Why? (Hint: if false, state a counterexample)
 - b). Is the statement $\exists a \in A, a \leq -1$ true or false? Why?
- 2). Explain why $\frac{x+y}{x} = 1 + y$ is incorrect? What should it equal?
- 3). Let $x = y - 1$. Explain why $y - x = y - y - 1 = -1$ is incorrect? What should it equal?
- 4). Type the following equation into your calculator to obtain an answer. You must type it in all at once—not in pieces. Turn in a screenshot showing how you entered it and your answer:

$$\frac{1 - (2 + \frac{3}{2})}{\frac{2}{3} - \frac{4}{5}}$$