

Name: _____

QUIZ 1 

MATH 300
August 22, 2024

1. Write this set by listing its elements between braces: $\{x \in \mathbb{Z} : |2x| < 5\}$

2. Express the set $X = \{\dots, \frac{1}{8}, \frac{1}{4}, \frac{1}{2}, 1, 2, 4, 8, \dots\}$ in set-builder notation.

3. If $A = \{x \in \mathbb{Z} : 1 \leq x^2 \leq 4\}$, then $|A| =$

4. Find the cardinality of the set $B = \{\{\{1, 4\}, a, b, \{3, 4\}, \{\emptyset\}\}$.