

Math 270 - Basic Discrete Mathematics
Practice Quiz on Section 1.2

Directions: Answer problems 1-4 given below.

1. Let $A = \{1, 2, 3, 4, 5, 6, 7, 8\}$. Write the following sets in set-roster notation.

a. $X = \{x \in A \mid x \text{ is even} \}$

$X =$

b. $Y = \{y \in A \mid 3 < y \leq 7\}$

$Y =$

2. Again, let $A = \{1, 2, 3, 4, 5, 6, 7, 8\}$. Write the following sets in set-builder notation.

a. $B = \{1, 3, 5, 7\}$

$B =$

b. $C = \{2, 3, 4\}$

$C =$

3. Write $\{1, 2, 3\} \times \{x, y\}$ in set-builder notation.

$\{1, 2, 3\} \times \{x, y\} =$

4. Answer the following (no justification required).

a. Is $2 \in \{2\}$?

b. Is $2 \subseteq \{2\}$?

c. How many elements are in the set $\{2, \{2, 2\}\}$?