

Practice Problems 1

ECON 441: Introduction to Mathematical Economics

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Exercise 2.3

1. Write the following in set notation:

(a) The set of all real numbers greater than 34.

(b) The set of all real numbers greater than 8 but less than 65.

2. Given the sets $S_1 = \{2, 4, 6\}$, $S_2 = \{7, 2, 6\}$, $S_3 = \{4, 2, 6\}$, and $S_4 = \{2, 4\}$, which of the following statements are true?

a) $S_1 = S_3$

b) $S_1 = \mathbb{R}$

c) $8 \in S_2$

d) $3 \notin S_2$

e) $4 \notin S_3$

f) $S_4 \subset \mathbb{R}$

g) $S_1 \supset S_4$

h) $\emptyset \subset S_2$

i) $S_3 \supset \{1, 2\}$

Note that $\mathbb{R}$ denotes the set of real numbers.