

PEER-ASSISTED REFLECTION (PAR) FOR INTRODUCTION TO FUNCTIONS AND INTERVAL NOTATIONS

Success Criteria

- [] I can read, understand, and translate between set notation, interval notation, and a number line.
- [] I can determine whether a relation is also a function.
- [] I can identify the domain and range of a relation.
- [] I can categorize a function as one-to-one, onto, both, or neither.
- [] I can identify whether a function is discrete or continuous.
- [] I can read, write, and understand function notation: $f(x)$.
- [] I can evaluate functions for given x-values.

- 1) The domain of a relation is $\{x|x \geq 0\}$ and the range is $[-4, \infty)$.
 - a. Express the domain and range of this relation in set notation, interval notation, and as a number line.
 - b. Graph a relation that is **NOT** a function that has this domain and range. Explain why your graph is **NOT** a function.
 - c. Graph a relation that is **ALSO** a function that has this domain and range. Explain why your graph **IS** a function.
- 2) **Claim:** *If a function is onto, then it must be one-to-one as well.*
Justify or refute this claim using mathematical evidence and logical reasoning.
- 3) Sara was born exactly two years before Sam.
 - a. Write a function that describes Sam's age, given Sara's age.
 - b. What do the domain and range represent?
 - c. Explain why you think this function is **either** *discrete* or *continuous*.
 - d. How old was Sam when Sara was ten-and-a-half years old?

Reviewed by: _____

Rate your peer's mastery of the success criterion (this is the *last* thing you do):

- [] I can read, understand, and translate between set notation, interval notation, and a number line.

0—DO NOT check that box	1—ALMOST check that box	2—CHECK that box
Many mathematical errors and/or incomplete or unclear annotations	Few mathematical errors and/or somewhat incomplete or unclear annotations	No mathematical errors and perfectly complete and clear annotations

- [] I can determine whether a relation is also a function.

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- [] I can identify the domain and range of a relation.

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- [] I can categorize a function as one-to-one, onto, both, or neither.

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- [] I can identify whether a function is discrete or continuous.

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- [] I can read, write, and understand function notation: $f(x)$.

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- [] I can evaluate functions for given x-values.

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DRAFT SOLUTION

ANNOTATIONS (*author's and peer's*)

FINAL SOLUTION

ANNOTATIONS (*author's only*)