
Goals:

Name: _____

To create your own number systems with unique numerals and rules. Provide 3 examples illustrating how your system works. Then provide 6 example problems (with solutions on back) for a classmate to try.

Part I: Create and Name your own Base 5 simple grouping system.

- 1) Create your own symbols (do not use any numerals used so far) and what they represent in our own Hindu-Arabic Number system.
- 2) Create the rules for how you want your system to work, and provide at least 3 examples that help illustrate how your rules work.
- 3) Provide at least 3 example problems converting from your number system to the Hindu-Arabic number system. (label and write the solutions on the back of this page)
- 4) Provide at least 3 example problems converting from to the Hindu-Arabic number system to your number system. (label and write the solutions on the back of this page)

This is the _____ number system. It is base _____ and is a _____ system

Part II: Create and Name your own Base 3 positional number system.

- 1) Create your own symbols (do not use any numerals used so far) and what they represent in our own Hindu-Arabic Number system.
- 2) Create the rules for how you want your system to work, and what the place values are. Provide at least 3 examples that help illustrate how your rules work.
- 3) Provide at least 3 example problems converting from your number system to the Hindu-Arabic number system. (label and write the solutions on the back of this page)
- 4) Provide at least 3 example problems converting from to the Hindu-Arabic number system to your number system. (label and write the solutions on the back of this page)

Answer the following questions about this number system:

Can this number system represent every counting number or are there missing numbers? If so which ones can you find missing?

Are there any numbers that you can represent two different ways? Which ones?

This is the _____ number system. It is base _____ and is a _____ system

Solutions to examples from other side: