

Math4010
HW #5 Questions

(1) Discussion of Zero. **(Must be typed and in your own words!)** Zero is quite a special number with some unique qualities, so we need to give it some attention. Please answer these questions with complete sentences.

- (a) What is zero?
- (b) Why do we need zero?
- (c) Discuss how zero behaves
 - (i) With addition.
 - (ii) With subtraction.
 - (iii) With multiplication.
 - (iv) With division.
 - (v) As an exponent.

Be sure to illustrate with examples and explain clearly what problems are associated with zero.

(2) Reflection Question: **(Must be Typed)** How can studying other number systems help us better understand our own number system? How will it help you teach children?