In class work 2

1. Write as an inequality
   1. is greater than
   2. is less than 2
2. Graph the inequality
3. Write, in set builder notation, the domain of the variable in the algebraic expressions
4. The weekly production cost, , of manufacturing watches is given by the formula

, where is measured in dollars.

* 1. What is the cost of producing 1000 watches?
  2. What is the cost of producing 2000 watches?

1. In the United States, normal household voltage is 110 volts. It is acceptable for the actual voltage to differ from normal by at most volts. A formula that describes this is

.

* 1. Show that a voltage of 108 volts is acceptable.
  2. Show that a voltage of 104 volts is not acceptable.

1. Is there a positive real number “closest” to zero?