

New Concepts

Problem Set #10

“Hypotheses non fingo.”

“The description of right lines and circles, upon which geometry is founded, belongs to mechanics. Geometry does not teach us to draw these lines, but requires them to be drawn.”

- Isaac Newton

New Postulates and Theorems

- Theorem 10 – If two angles are supplements of congruent angles (or of the same angle), then the two angles are congruent.
- Theorem 11 – If two angles are complements of congruent angles (or of the same angle), then the two angles are congruent.

Exercises:

p.63 #15-24

Problems:

10-1 Powers of 2

What is the largest integral value of k for which 2^k divides evenly into the sum:

$$2^{64} + 4^{32} + 8^{16} + 16^8 + 32^4 + 64^2$$