

Math 211 POW One

Format

- Write neatly and clearly on white paper (lined or unlined)
- Attach a POW cover sheet to the front of your work for turn in

Directions

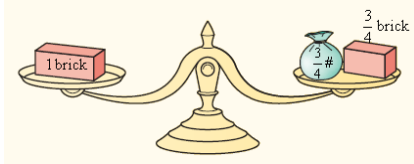
- Refer to your POW directions (Math 211 Problem of the Week Directions)
- Read **all** of the directions given here

1. Use Polya's four steps ONE TIME and answer the following three problems:

a. The Problem Opener for Section 1.3, page 37 in your *Conceptual Approach* text.

A whole brick is balanced with $\frac{3}{4}$ pound and $\frac{3}{4}$ brick.

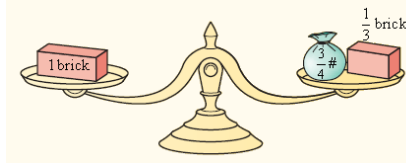
What is the weight of the whole brick?



b. Extension One: Solve the original problem with the following change.

A whole brick is balanced with $\frac{3}{4}$ pound and $\frac{1}{3}$ brick.

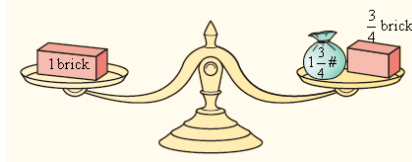
What is the weight of the whole brick? The scale is still balanced.



c. Extension Two: Solve the original problem with the following change.

A whole brick is balanced with $1\frac{3}{4}$ pound and $\frac{3}{4}$ brick.

What is the weight of the whole brick? The scale is still balanced.



As you work, explain the problems without formal algebra and explain the problems with formal algebra. You may weave these two complimentary ideas into the four steps as you like.