

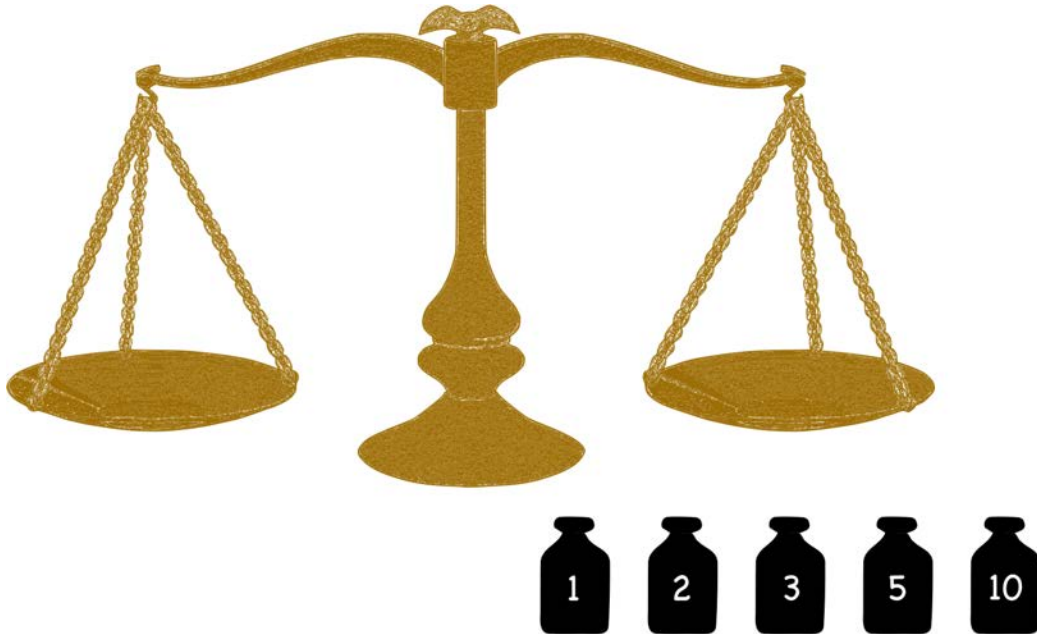
# Puzzle of the Week

## *Pan Balance With Weights – 5*

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A pan balance tells you when its two sides are carrying the same amount of weight or whether one side is heavier than the other.

**THE CHALLENGE:** You would like to be able to weigh anything that is a whole number of ounces from 1 ounce up to 15 ounces. If you can only put the weights on one side of the pan balance, what is the fewest number of weights that will make this work and what will the weights be?



**EXPLORATION:** How does your answer change if you want to be able to weigh anything between 1 ounce and 25 ounces? How about other ranges? Are there some ranges where there is only one best answer, and other ranges where there are many?