

Worksheet #2

1. $\frac{1}{x} + \frac{1}{2x} + \frac{1}{3x} = 3$. Express x as a fraction in lowest terms.

2. In how many ways can you pay 80 cents using any combination of 5, 10, and 25 cent coins?

3. A triangle has sides L , M , and N , where $0 < L < M < N < 12$ are all whole numbers. The perimeter of the triangle is P . How many different values of P are there?

4. There is a pile of 5 cards numbered $1, 2, 3, 4, 5$ on the table. Gloria takes 3 different cards at random from the pile and writes down the sum of these 3 cards. What is the probability that the sum is a multiple of 3? Express the answer as a fraction in lowest terms.

5. x is a 2-digit positive number whose digits are two consecutive odd numbers.
 y is defined to be the 2-digit positive number with the digits of x reversed.
What is the maximum possible value of $N = x + y$?