Math exercises.

1 - Complete the following table with yes (Y) or no (N).

	Divisible by 2	Divisible by 3	Divisible by 4	Divisible by 5	Divisible by 6	Divisible by 9	Divisible by 25
504							
1,386							
2,019							

2 - Replace □ by the missing digit. Write all the possibilities.

6 2 □ is divisible by 3.　_____

5 4 □ is divisible by 9.　_____

7 □ 6 is divisible by 4.　_____

3-Find the GCD of each pair:

a)　25 and 26
b)　40 and 30
c)　24 and 36
d)　42 and 28

4 - a) What does **20** represent **with respect to 60?**

　b) What is the G.C.D. of the numbers **20 and 60**? **Why?**

5-Complete by filling the empty boxes:

a) $\dfrac{16}{32} = \dfrac{\text{........}}{16} = \dfrac{\text{........}}{8}$

b) $\dfrac{8}{8} = \dfrac{\text{........}}{24} = \dfrac{32}{\text{........}}$

c) $\dfrac{21}{14} = \dfrac{3}{\text{......}} = \dfrac{\text{........}}{28}$

d) $\dfrac{13}{26} = \dfrac{\text{......}}{260}$

6 - Katy is making identical balloon arrangements for a party. She has
24 white balloons and **16 orange balloons**. She wants each arrangement to have the same number of color.
a) What is the greatest number of arrangements that she can make if every balloon is used?

b) How many balloons of each color will there be in each arrangement?

7- Simplify the following Fractions:

a) $\dfrac{22}{33}$ b) $\dfrac{126}{105}$ c) $\dfrac{54}{42}$ d) $\dfrac{800}{600}$ e) $\dfrac{16}{20}$

8 - a) Find the GCD of 32 and 48

b) Divide the numerator and denominator of the fraction $\dfrac{32}{48}$ by their GCD. Find the fraction that is equal to it.

c) Is the obtained fraction in part 2 irreducible? Justify your answer.

9 - Consider the fraction $\dfrac{16}{28}$.
a) Reduce this fraction, and then find all the fractions that are equivalent to the reduced one but with a denominator less than 50.
b) Is $\dfrac{16}{28}$ a decimal fraction?

10 - Write each of the fractions below as a decimal fraction , then give its equivalent decimal number:

$\dfrac{1}{4} =$ $\dfrac{2}{5} =$

$\dfrac{30}{4} =$ $\dfrac{98}{25} =$

11- Given the decimal fraction $\dfrac{3}{10}$. We add 5 to both terms of the fraction.
a) What is the new (obtained) fraction?
b) Is it a decimal fraction? Why or Why not?
c) What is its decimal number?

12.- What does the fraction of the red rectangle represent to the square? Transform this fraction into a decimal fraction.