

Math Test Study Guide: Test Friday 11/20

Factors, Multiples and Leftovers



This test focuses on our “Mentoring Mathematical Minds” enrichment units and not our Pearson Textbooks. All of the homework that we have completed this past week are great resources to study ☺

**This does not need to be turned in! Use this as practice.

Vocabulary

Associative property of multiplication—the product of a set of numbers is the same no matter how many numbers are grouped.

For example: $2 \times (3 \times 4) = (2 \times 3) \times 4$, or $a \times (b \times c) = (a \times b) \times c$

Commutative property of multiplication—also known as the order property; the order of multiplying the numbers does not change the product

For example: $6 \times 7 = 7 \times 6$

Distributive Property of multiplication— $a \times (b \times c) = (a \times b) + (a \times c)$ (In this problem, you are distributing the “a.”

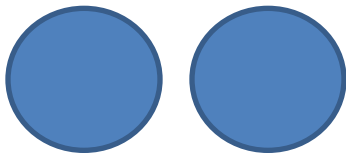
For example: $6 \times (10 + 4) = (6 \times 10) + (6 \times 4)$

$$6 \times 14 = 60 + 24 \quad \text{so, } 84 = 84$$

Array—a rectangular arrangement, using squares or dots, organized in rows and columns

Attribute—characteristics of members of a set (odd, even, prime, composite)

Disjoint Sets—sets that have no members in common (no intersection)



Factor—a number that divides exactly into a whole number

For example: 1, 2, 3 and 6 are factors of 6.

Multiple— a number that is the product of multiplying two numbers

For example: 6 is a multiple of 3 because $3 \times 2 = 6$.

Practice

Arrays: Draw the following array

6 x 8

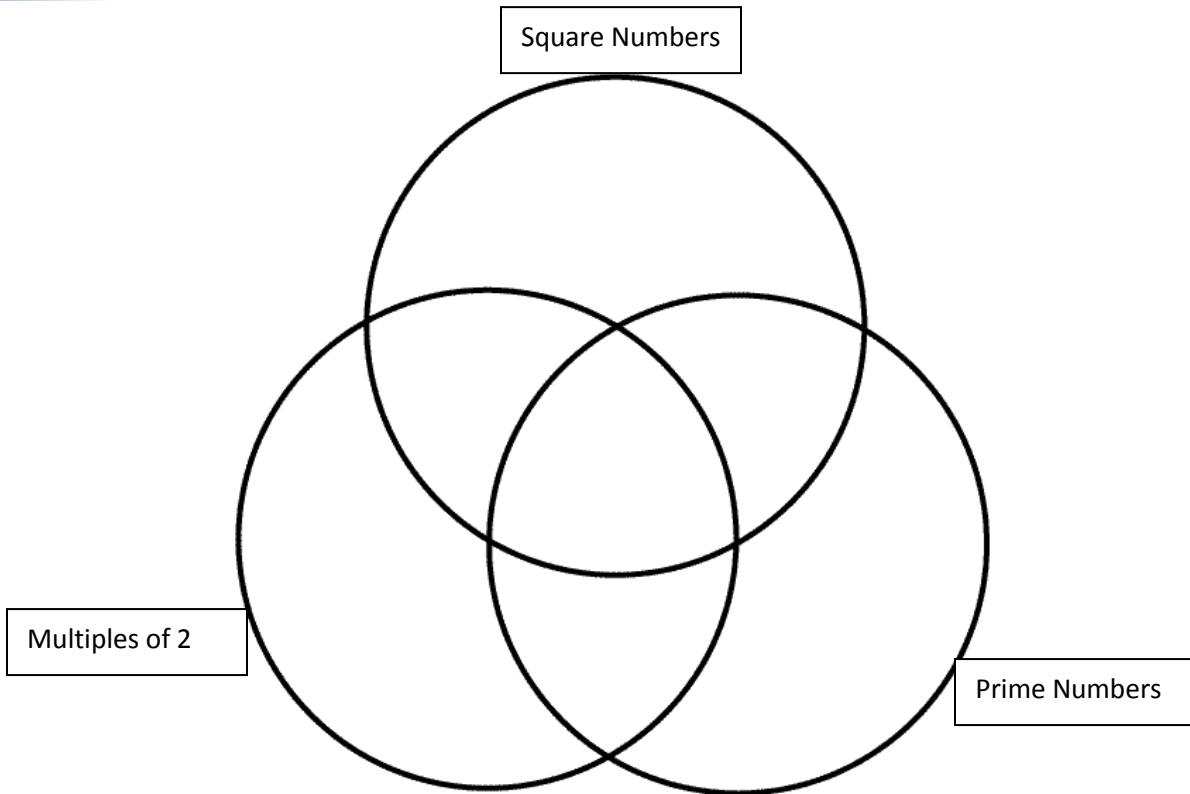
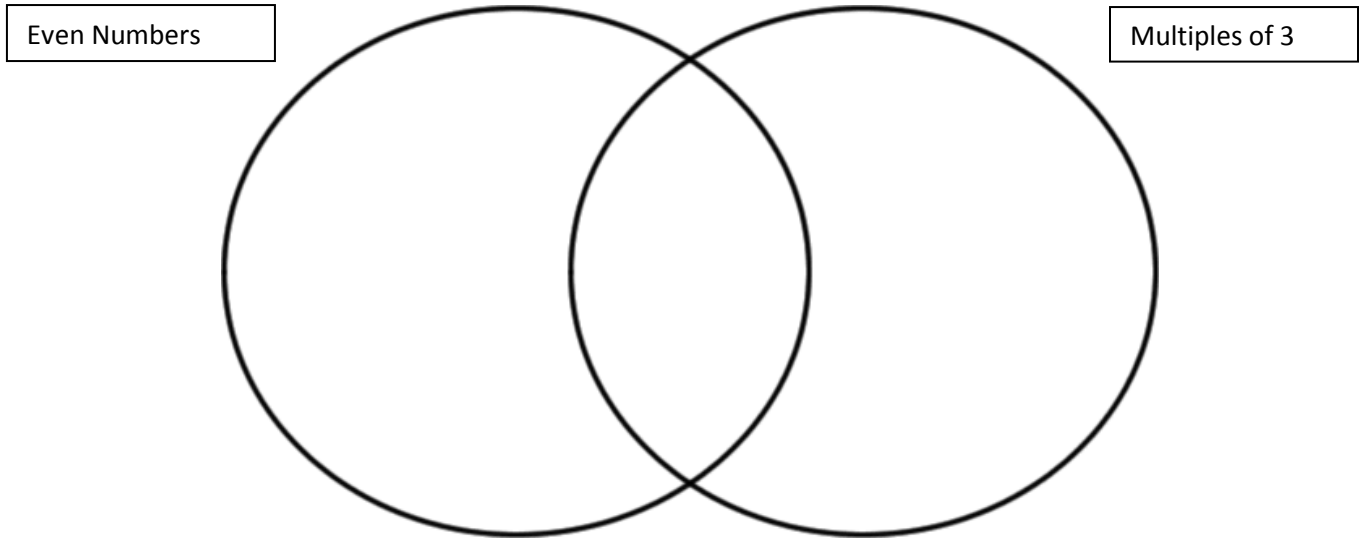
Show 2 ways that it can be separated:

Write the number problem to show the relationship:

$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

Venn Diagrams

For the following numbers, place them in the correct sections: 1,2,3,4,5,6,8,10,12,15,16,24



Name that number

I'm thinking of a number...

- It is between 1-100
- It is prime
- It's digits add up to 10
- It has a 3 in the tens place
- What is my number? _____
- Explain your thinking.

Write a division story problem for $22 \div 4$ that has the answer $5 \frac{1}{2}$.
