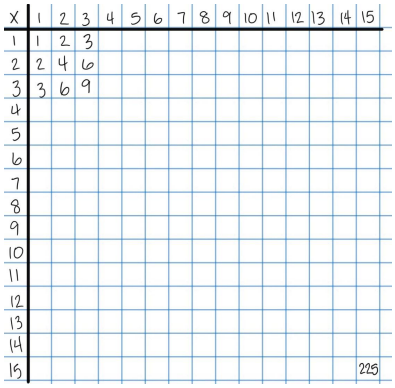
Math Work for ALL students

March 30 - April 3

1. Complete the worksheets (factors and decimal multiplication) - no calculators

2. Use grid paper to make a multiplication chart that goes to 15x15 - no calculators



3. Work on ALEKS for at least 1 hour during the week (if you have internet access)

4. Choose ONE of the following problems to work on (or do them both if you're interested!)

Consecutive Numbers

Consecutive numbers are numbers that are next to each other on the number line.

The number 12 can be written as adding consecutive numbers together.

$$3 + 4 + 5 = 12$$

3, 4, and 5 are consecutive numbers, and when we add them all together, they equal 12.

Another example of a consecutive number sum is 42, since

$$9 + 10 + 11 + 12 = 42$$

Can ALL numbers be written as sums (adding answers) of consecutive numbers?

Choose 10 random numbers between 50 and 100. Can you make a consecutive number addition sentence for each of them?

Hint: you have to add at least 2 numbers together, but you can use as many as you need, as long as they are all next to each other on the number line

Fewest Squares

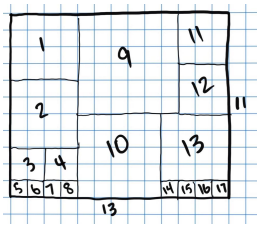
Use a grid paper to draw a rectangle that is 11 by 13.

If you traced around every individual square inside your rectangle, you would have 143 squares.

By tracing larger squares (3x3, 4x4, etc), what is the FEWEST number of squares you can draw inside your rectangle to cover the entire thing?

Try several times to see if you can come up with different solutions and fewer squares.

Example:



I used 17 squares to cover it. That's not very good, I could use way fewer!

Then try: Can you use fewer squares to cover a 12x15 rectangle?

FACTOR BLOCK

DIRECTIONS:

In each line of numbers below, shade in each box which contains a FACTOR of the given number. Please use pencil so you can erase if necessary.

YOU WILL DISCOVER A SPECIAL MESSAGE TO YOU!

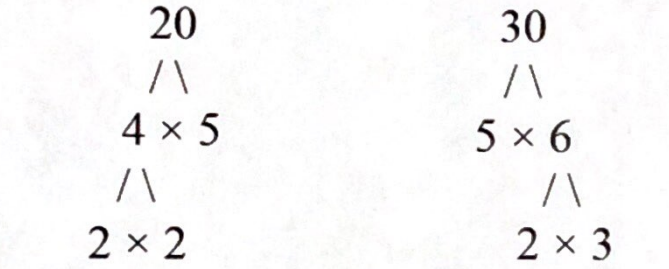
FACTORS OF 7	2	3	14	5	21	4	15	8	31	9	12	49	6	28	7
FACTORS OF 19	3	18	6	9	24	38	7	15	16	4	11	13	5	10	1
FACTORS OF 60	2	12	20	90	30	6	1	7	4	3	10	8	15	60	5
FACTORS OF 48	12	5	2	18	3	7	4	10	8	14	24	22	1	9	6
FACTORS OF 72	4	72	8	25	1	24	12	80	3	2	18	5	36	9	6
FACTORS OF 32	19	7	16	3	64	9	5	12	46	96	15	20	6	24	10
FACTORS OF 36	5	11	3	10	72	35	6	14	12	16	4	5	9	8	15
FACTORS OF 24	14	4	2	30	48	10	6	5	12	11	8	9	24	7	72
FACTORS OF 45	10	7	12	90	18	19	1	3	9	8	15	6	5	4	13
FACTORS OF 30	18	4	90	16	20	7	60	12	5	8	6	15	10	9	18

Finding the Greatest Common Factor Using Factor Trees

The **greatest common factor (GCF)** is the greatest factor that two or more numbers have in common. The GCF can be found by making a list and comparing all the factors. A factor tree can also be used to find the GCF. The GCF is the product of the common prime factors.

Let's find the GCF of 20 and 30 using a factor tree.

First, make a factor tree for each number.



$20 = 2 \times 2 \times 5$ $30 = 2 \times 3 \times 5$

Then, identify the common factors. The numbers 20 and 30 have the factors 2 and 5 in common.

20=2–×2×5–30=2–×3×5–

Next, multiply the common factors to find the GCF. If there is only one common factor, there is no need to multiply.

2×5=10

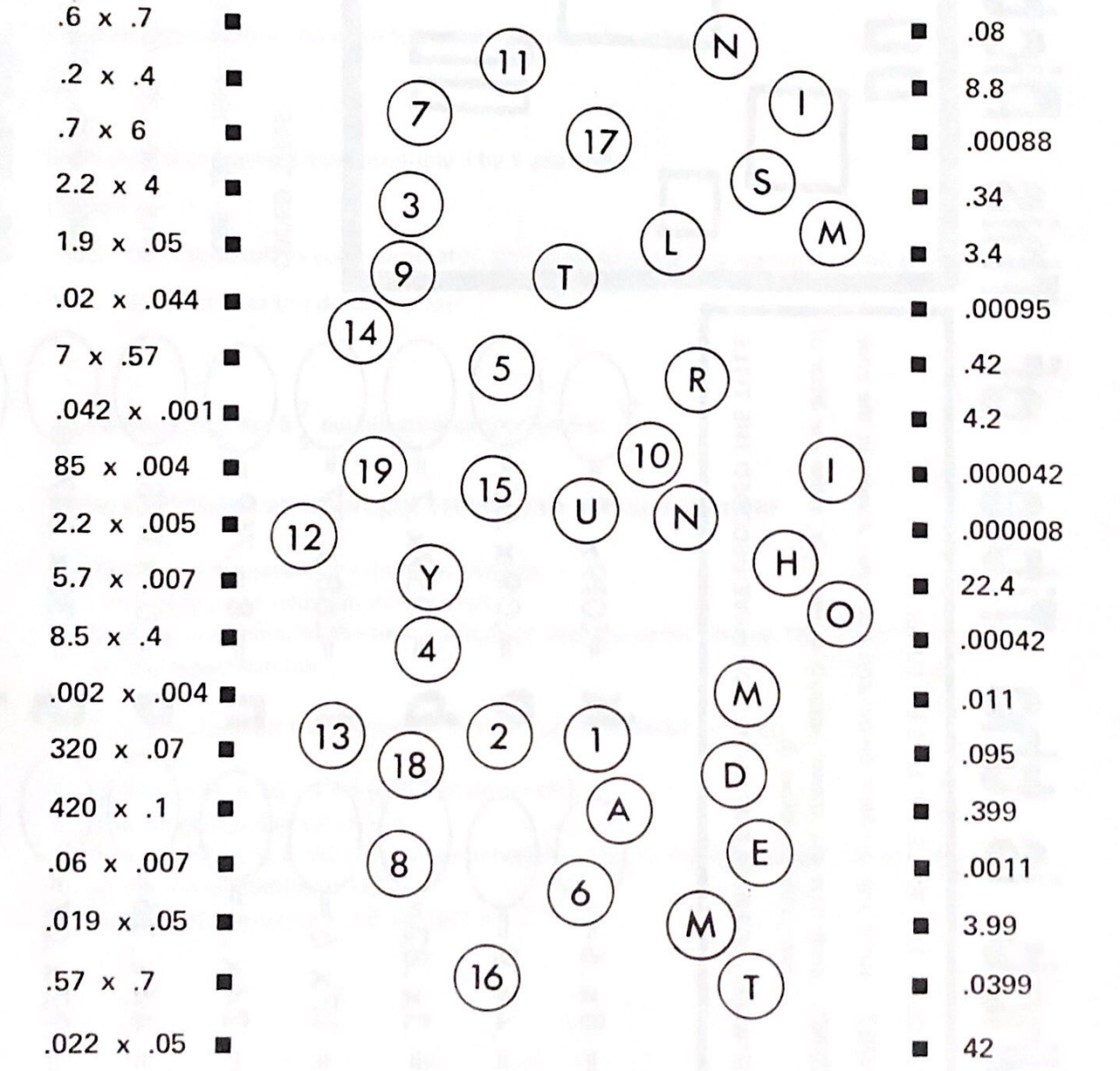
The GCF of 20 and 30 is 10.

Note that if the numbers being compared have no factors in common using a factor tree, they still have the factor 1 in common.

LINEUP

MATH IS NOT LIKE CHOCOLATE CANDY. TO FIND OUT WHY, FOLLOW THESE DIRECTIONS:

Draw a straight line connecting each problem with its correct answer. Each line will cross a number and a letter. The number tells you where to put the letter in the line of boxes at the bottom of the page.



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19