AIM: 4-5 I will be able to find the LEAST COMMON MULTIPLE of a set of numbers!

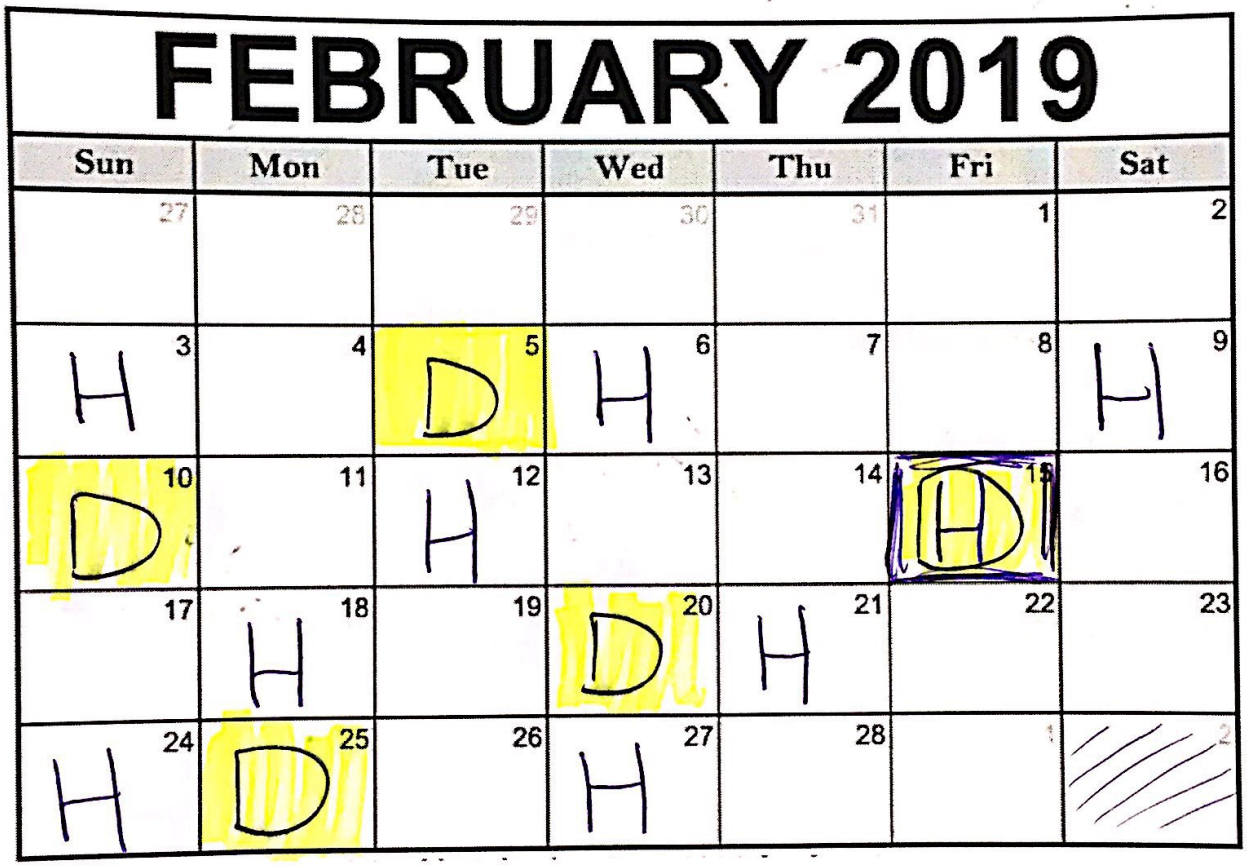
Name _____
Mrs. Ashley

Date Key
Math 6

Warm-up:

During the month of February, Clara will have hockey practice every third day and dance practice every fifth day.

a) In the calendar below, color each day that Clara has hockey practice in blue. Color each day that Clara has dance practice in yellow.



b) On which DATE will Clara have hockey and dance practice on the **same** day?

2/15/19

c) Will Clara have both hockey and dance practice together again in February? Explain!

No, because there are only 28 days in Februrary. The next time she will have both practices will be on March 2nd.

ultiples - The product of a number and any nonzero whole number.

List the first **EIGHT** *multiples* of 3 and 5.

3: 3, 6, 9, 12, (15), 18, 21, 24...

5: 5, 10, (15), 20, 25, 30, 35, 40...

Name **3 Common Multiples**:
(what 3 and 5 have in common)

15, 30, 45

What is the ***Least Common Multiple?***

15

Let's Investigate: Different Methods for finding the LCM!

Find the LCM of 12 and 18 using the two methods below.

LIST THE MULTIPLES

12: 12, 24, (36), 48, 60...

18: 18, (36), 54, 72, ...

LCM: 36

LADDER METHOD

2	12	18
3	6	9
1	2	3

LCM: 2 · 3 · 1 · 2 · 3

36

which method did you prefer?

To find the GCF we MULTIPLY the left column of numbers (Big G) G - GCF

To find the LCM we MULTIPLY the numbers in the shape of the L L - LCM

Names: _____ and _____

RALLY COACH RULES

1) Students sit in pairs (only one pencil and paper per pair)

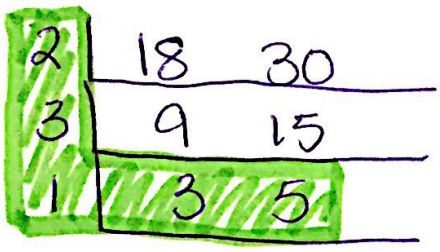
2) A solves → B coaches and praises

3) B solves → A coaches and praises

4) Switch and Repeat

Find the LEAST COMMON MULTIPLE of each set of numbers. Show your work!

A) 18 and 30

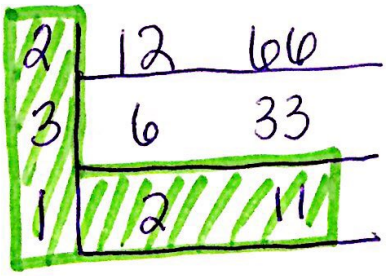


$2 \cdot 3 \cdot 1 \cdot 3 \cdot 5$

$6 \cdot 15$

LCM: 90

B) 12 and 66



$2 \cdot 3 \cdot 1 \cdot 2 \cdot 11$

$6 \cdot 22$

LCM: 132

A) 11 and 4

$1 \cdot 11 \cdot 4$

relatively prime

LCM: 44

B) 5 and 9

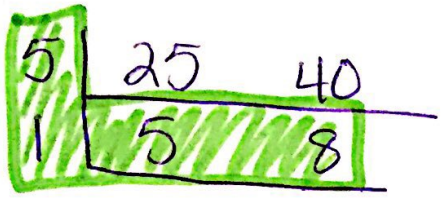
$1 \cdot 5 \cdot 9$

relatively prime

LCM: 45

51 ÷ 3 = 17

A) 25 and 40

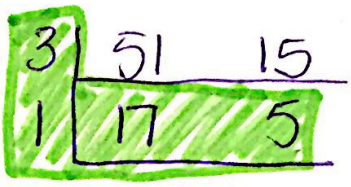


5 · 1 · 5 · 8

5 · 40

LCM: 200

B) 51 and 15



3 · 1 · 17 · 5

51 · 5

LCM: 255

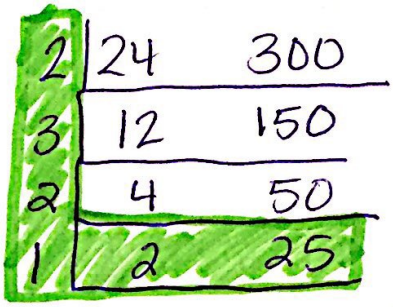
A) 200 and 28

4 · 1 · 50 · 7

200 · 7

LCM: 1400

B) 24 and 300



2 · 3 · 2 · 1 · 2 · 25

12 · 50

LCM: 600

A) 6, 12, and 15

To find the LCM of three digits, you should LIST THE MULTIPLES of each number!

6, 12, 18, 24, 30, 36, 42, 48, 54,

12, 24, 36, 48, (60), ...

15, 30, 45, (60), ...

(60), ...

LCM: 60

B) 10, 15, 30

To find the LCM of three digits, you should LIST THE MULTIPLES of each number!

10, 20, (30), 40, 50, 60...

15, (30), 45, 60, ...

(30), 60, 90, ...

LCM: 30