



Math Virtual Learning

# HS/Essential Math II

**May 1, 2020**



## High School/Essentials of Algebra Course 2

Lesson: May 1, 2020(U4L1 part 2)

### **Objective/Learning Target:**

- Build working memory & the ability to coordinate multiple constraints.
- Sharpen familiarity with properties of numbers & operations
- Sharpen arithmetic skills (recognizing multiples, factors, etc.)

# Mental Math \* Activity 1: Multiplying by 10

Multiply each yellow number by 10, next slide answer key.

|   |  |
|---|--|
| 7 |  |
| 1 |  |
| 6 |  |
| 9 |  |
| 3 |  |

|    |  |
|----|--|
| 4  |  |
| 10 |  |
| 17 |  |
| 11 |  |
| 22 |  |

|      |  |
|------|--|
| 71   |  |
| 8    |  |
| 67   |  |
| 40   |  |
| - 40 |  |

|     |  |
|-----|--|
| 18  |  |
| 26  |  |
| 13  |  |
| 82  |  |
| 100 |  |

# Mental Math \* Activity 1: Multiplying by 10

Multiply each yellow number by 10, next slide answer key.

|   |    |
|---|----|
| 7 | 70 |
| 1 | 10 |
| 6 | 60 |
| 9 | 90 |
| 3 | 30 |

|    |     |
|----|-----|
| 4  | 40  |
| 10 | 100 |
| 17 | 170 |
| 11 | 110 |
| 22 | 220 |

|     |      |
|-----|------|
| 71  | 710  |
| 8   | 80   |
| 67  | 670  |
| 40  | 400  |
| -40 | -400 |

|     |      |
|-----|------|
| 18  | 180  |
| 26  | 260  |
| 13  | 130  |
| 82  | 820  |
| 100 | 1000 |

LESSON

1, 2, 3, 4 Latin Square

|   |   |   |   |
|---|---|---|---|
|   | 3 | 1 |   |
|   |   |   | 4 |
| 3 |   |   |   |
| 4 | 2 |   |   |

★, ■, ●, ▲ Latin Square

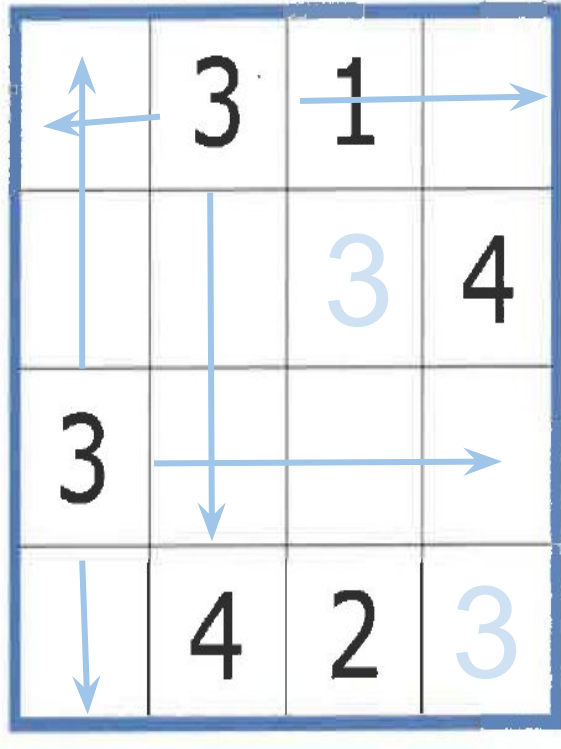
|   |   |   |   |
|---|---|---|---|
| ● |   |   | ▲ |
|   | ■ |   |   |
|   |   |   | ★ |
|   |   | ★ |   |

d, e, f, g Latin Square

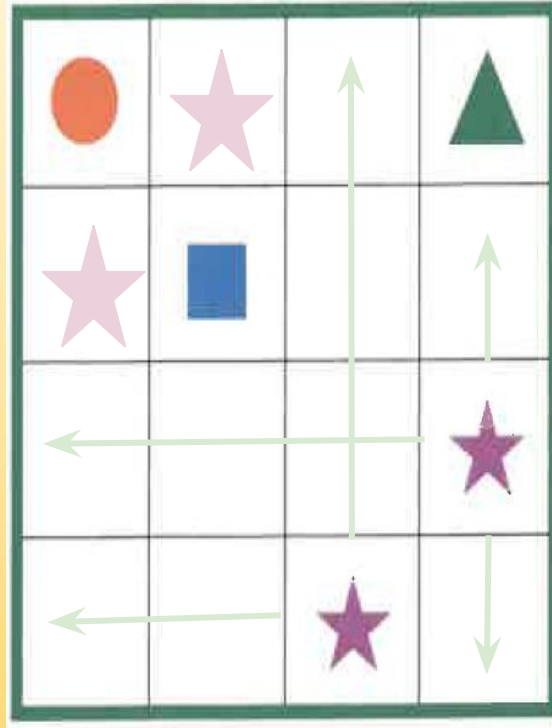
|          |          |          |          |
|----------|----------|----------|----------|
|          |          |          | <i>f</i> |
| <i>f</i> |          | <i>g</i> |          |
|          |          | <i>e</i> |          |
| <i>g</i> | <i>e</i> |          |          |

LESSON

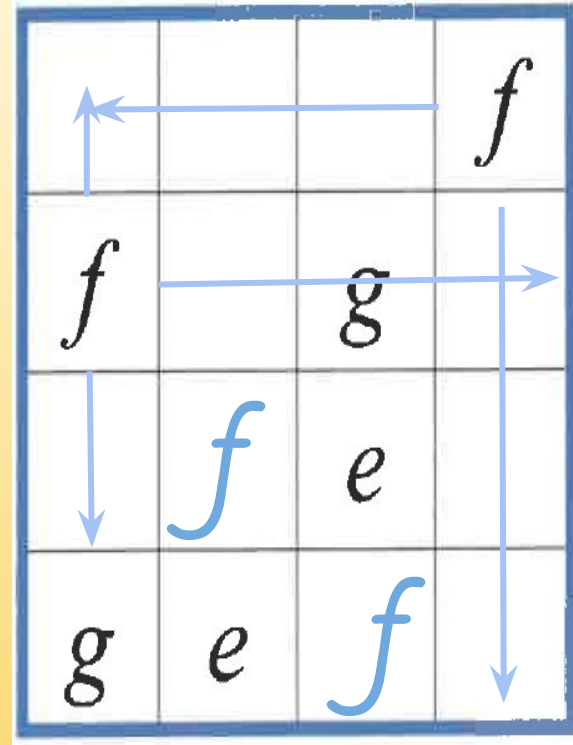
1, 2, 3, 4 Latin Square



★, ■, ●, ▲ Latin Square



d, e, f, g Latin Square



*Start with what you know and eliminate bad choices. It will reveal good/ better choices.*

ANSWER

**1, 2, 3, 4** Latin Square

|   |   |   |   |
|---|---|---|---|
| 4 | 3 | 1 | 2 |
| 2 | 1 | 3 | 4 |
| 3 | 2 | 4 | 1 |
| 1 | 4 | 2 | 3 |

★, ■, ●, ▲ Latin Square

|   |   |   |   |
|---|---|---|---|
| ● | ★ | ■ | ▲ |
| ★ | ■ | ▲ | ● |
| ■ | ▲ | ● | ★ |
| ▲ | ● | ★ | ■ |

**d, e, f, g** Latin Square

|   |   |   |   |
|---|---|---|---|
| e | g | d | f |
| f | d | g | e |
| d | f | e | g |
| g | e | f | d |

Keep looking for patterns. I have been teaching this for years and I am still looking. Tell your Essential Math teacher if you find one..

# Stuff to Make You Think

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MysteryGrid 1, 2, 3, 4

|     |     |     |     |
|-----|-----|-----|-----|
| 8,• |     | 6,• | 4,• |
| 4,+ |     |     |     |
| 3,- | 5,+ | 7,+ |     |
|     |     | 3,+ |     |

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MysteryGrid 1, 3, 5, 7

|      |      |      |     |
|------|------|------|-----|
| 35,• |      | 21,• |     |
|      | 15,• |      | 5,• |
| 8,+  | 7,•  | 4,+  |     |
|      |      |      | 7   |

← ↑

7



# Answers to Stuff to Make You Think

①⑨

MysteryGrid **1, 2, 3, 4**

|          |          |          |          |
|----------|----------|----------|----------|
| 8,•<br>2 | 4        | 6,•<br>3 | 4,•<br>1 |
| 4,+<br>3 | 1        | 2        | 4        |
| 3,-<br>1 | 5,+<br>2 | 7,+<br>4 | 3        |
| 4        | 3        | 3,+<br>1 | 2        |

①⑩

MysteryGrid **1, 3, 5, 7**

|           |           |           |          |
|-----------|-----------|-----------|----------|
| 35,•<br>1 | 5         | 21,•<br>7 | 3        |
| 7         | 15,•<br>3 | 5         | 5,•<br>1 |
| 8,+<br>3  | 7,•<br>7  | 4,+<br>1  | 5        |
| 5         | 1         | 3         | 7<br>7   |

# Additional Practice

(D) 2, 3, 5 Latin Square

|   |   |   |
|---|---|---|
|   |   |   |
| 5 |   |   |
|   | 5 | 2 |

(E) ■, ●, ▲ Latin Square

|   |   |  |
|---|---|--|
|   | ■ |  |
|   |   |  |
| ▲ |   |  |

(F) 1, 2, 3, 4 Latin Square

|   |   |   |   |
|---|---|---|---|
| 3 |   |   | 4 |
|   |   |   | 2 |
|   | 1 |   |   |
|   |   | 2 |   |

(G) MysteryGrid 1, 2, 3

|     |     |     |
|-----|-----|-----|
| 9,• |     | 6,+ |
|     | 4,• |     |
|     |     |     |

(H) MysteryGrid 1, 2, 3

|     |     |  |
|-----|-----|--|
| 3,+ | 5,+ |  |
|     | 3,• |  |
| 6,• |     |  |

Remember to use notes to record what you know.

Like this:

|     |   |  |
|-----|---|--|
| 6,• | 3 |  |
|     | 4 |  |

# Additional Practice Answer Key

**D** 2, 3, 5 Latin Square

|   |   |   |
|---|---|---|
| 2 | 3 | 5 |
| 5 | 2 | 3 |
| 3 | 5 | 2 |

**E** ■, ●, ▲ Latin Square

|   |   |   |
|---|---|---|
| ● | ■ | ▲ |
| ■ | ▲ | ● |
| ▲ | ● | ■ |

**F** 1, 2, 3, 4 Latin Square

|   |   |   |   |
|---|---|---|---|
| 3 | 2 | 1 | 4 |
| 1 | 4 | 3 | 2 |
| 2 | 1 | 4 | 3 |
| 4 | 3 | 2 | 1 |

**G** MysteryGrid 1, 2, 3

|      |      |      |
|------|------|------|
| 9, ● |      | 6, + |
| 1    | 3    | 2    |
| 3    | 4, ● | 1    |
| 2    | 1    | 3    |

**H** MysteryGrid 1, 2, 3

|      |      |   |
|------|------|---|
| 3, + | 5, + |   |
| 1    | 3    | 2 |
| 2    | 3, ● | 3 |
| 6, ● |      | 1 |

Remember to use notes to record what you know.

Like this:

|      |   |
|------|---|
| 6, ● | 3 |
|      | 2 |



## Mystery Grids

Lesson: April 30, 2020 (U4L1 part II)

Today you:

Built your working memory & the ability to coordinate multiple constraints.

Sharpened familiarity with properties of numbers & operations

Sharpened arithmetic skills (recognizing multiples, factors, etc.)

For additional practice, click the link: [\*\*Solve Me Mystery Grids\*\*](#)