**HW #1** NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

TRIMESTER THREE

DUE \_\_\_\_\_\_\_\_

FEEDBACK FROM TEACHER:

SHOW WORK PLEASE NEATER PLEASE WRITE TIME SPENT PLEASE CORRECT

LEVEL 3  *\_\_\_\_\_* *( √, √+, or √++)*

TIME SPENT: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student feedback: (optional) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**LEVEL 1 Rulers:**

1. Label all the fractional markings on this “foot ruler”- simplify when possible.

0

1½

1





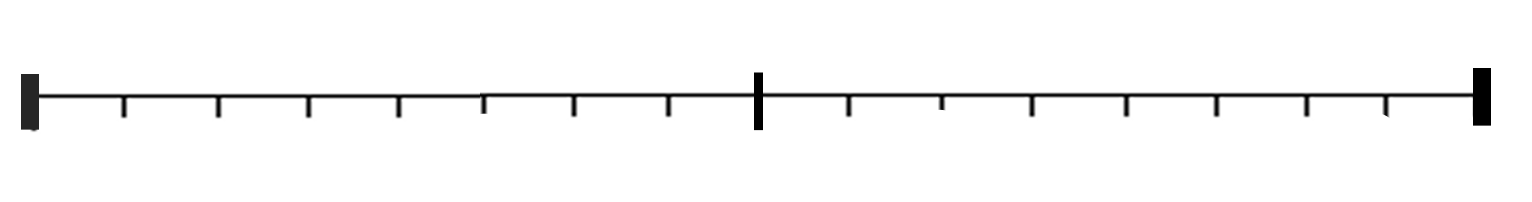
1. Label all the fractional markings on this “foot ruler”- simplify when possible.

1½

1

1. What is this SUM?

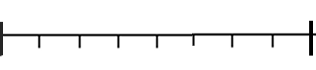






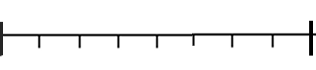
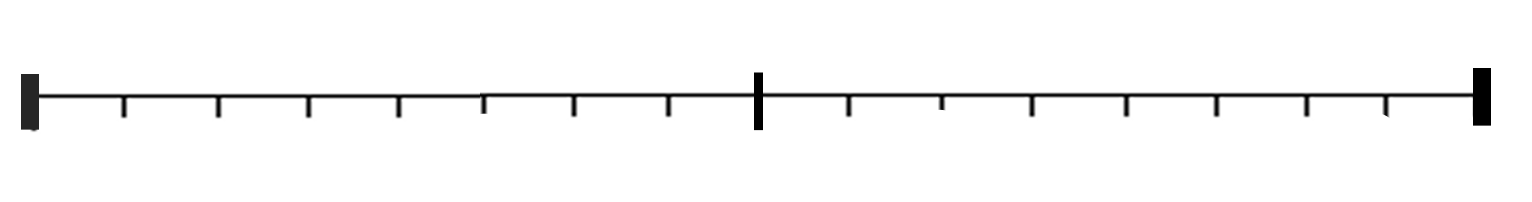
1½

1



1. What is this DIFFERENCE?





1

1½

This is being SUBTRACTED

**LEVEL 2**

**#4.**  a) 2,008 ÷ 40

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1,000 | 100 | 10 | 1 | 0.1 |
| *Before:* |  |  |  |  |  |
| ÷ 4 |  |  |  |  |  |
| ÷ 10 |  |  |  |  |  |

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b) 2130 3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1,000 | 100 | 10 | 1 | 0.1 |
| *Before:* |  |  |  |  |  |
| ÷ 3 |  |  |  |  |  |
| ÷ 100 |  |  |  |  |  |

.

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**#5**

1. What pattern do you see

in the LEFT “wing” of rhombuses only:

Step 1 1 rhombus

Step 2 4 rh.

Step 3 \_\_\_\_\_ rh.

Step 4 \_\_\_\_\_\_ rh

Step 5 \_\_\_\_\_ rh.

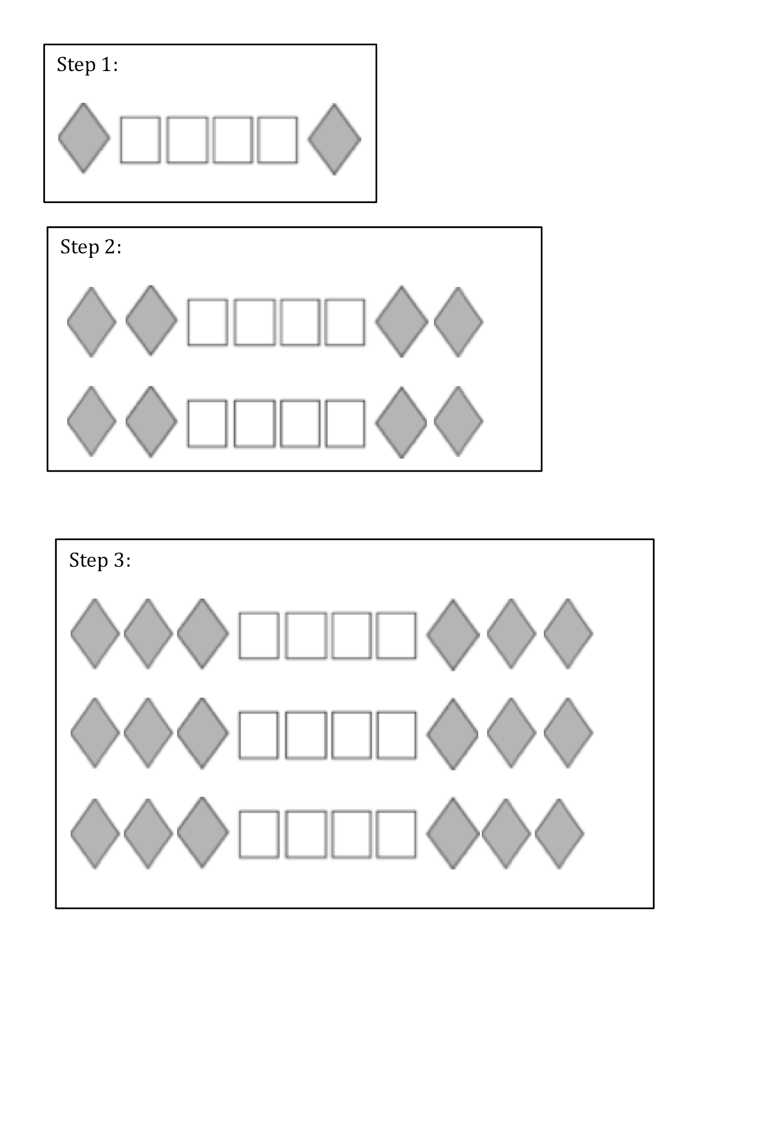
Step 10 \_\_\_\_\_\_ rh.

Challenge:

Step 100 ? \_\_\_\_\_ rh.

Step “n” ?? \_\_\_\_\_\_ rh

**Patterns**

****

1. in the LEFT “wing” of rhombuses only:

Step 1 1 rhombus

Step 2 4 rh.

Step 3 \_\_\_\_\_ rh.

Step 4 \_\_\_\_\_\_ rh

Step 5 \_\_\_\_\_ rh.

Step 10 \_\_\_\_\_\_ rh

Step 100 \_\_\_\_\_ rh.

Step “n” \_\_\_\_\_\_ rh



**c)** Challenge

What pattern do you see in the TOTAL number of **quadrilaterals**? (squares **and** rhombuses)

Step 1 6 quadrilaterals

Step 2 12 qu.

Step 3 \_\_\_\_\_ qu.

Step 4 \_\_\_\_\_\_ qu

Step 10 \_\_\_\_\_\_\_\_ sq

Step 43 ? \_\_\_\_\_\_\_\_ sq

Challenge:

Step 10 ? \_\_\_\_\_\_\_\_ sq

Step 43 ?? \_\_\_\_\_\_\_\_ sq

**b)** What pattern do you see in the **squares**

Step 1 4 squares

Step 2 8 sq.

Step 3 \_\_\_\_\_\_ sq.

Step 4 \_\_\_\_\_\_\_ sq.

Challenge:

Step 10 ? \_\_\_\_\_\_\_\_ sq

Step 43 ?? \_\_\_\_\_\_\_\_ sq



#6

Multiplication Diamonds:

Multiply





0

50

30

30

6

24

6

6

6

6

5



3

27

17

13



add

LEVEL C, optional challenge - Counting like a computer

**Can you draw in the beads for these numbers?**

a) **33** b) **17**

64 32 16 8 4 2 1

64 32 16 8 4 2 1

64 32 16 8 4 2 1

64 32 16 8 4 2 1

64 32 16 8 4 2 1

64 32 16 8 4 2 1



c) **24** d) **130**



128

128

e) **135** f) **193**



128

128

