

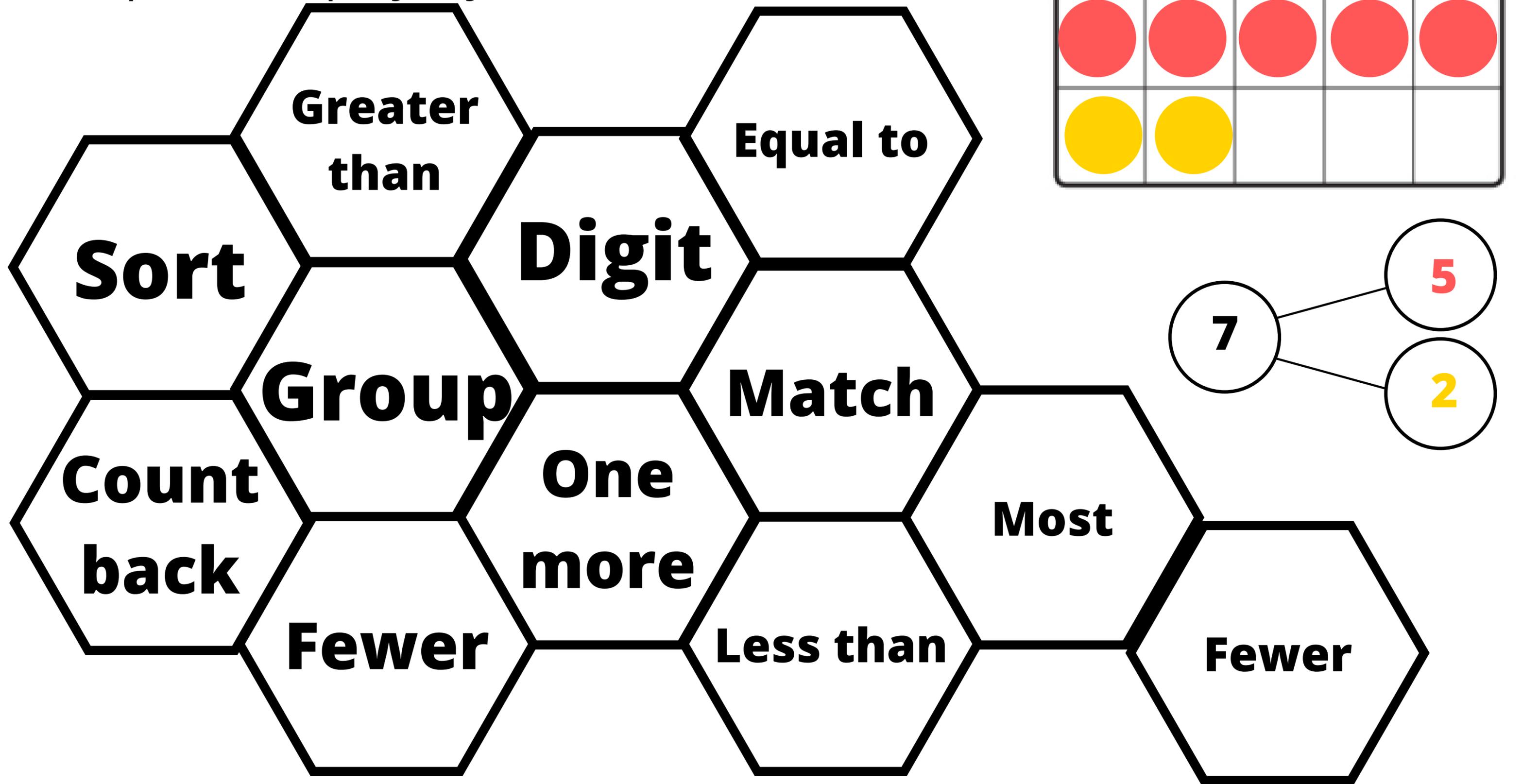
Mathematical
Vocabulary

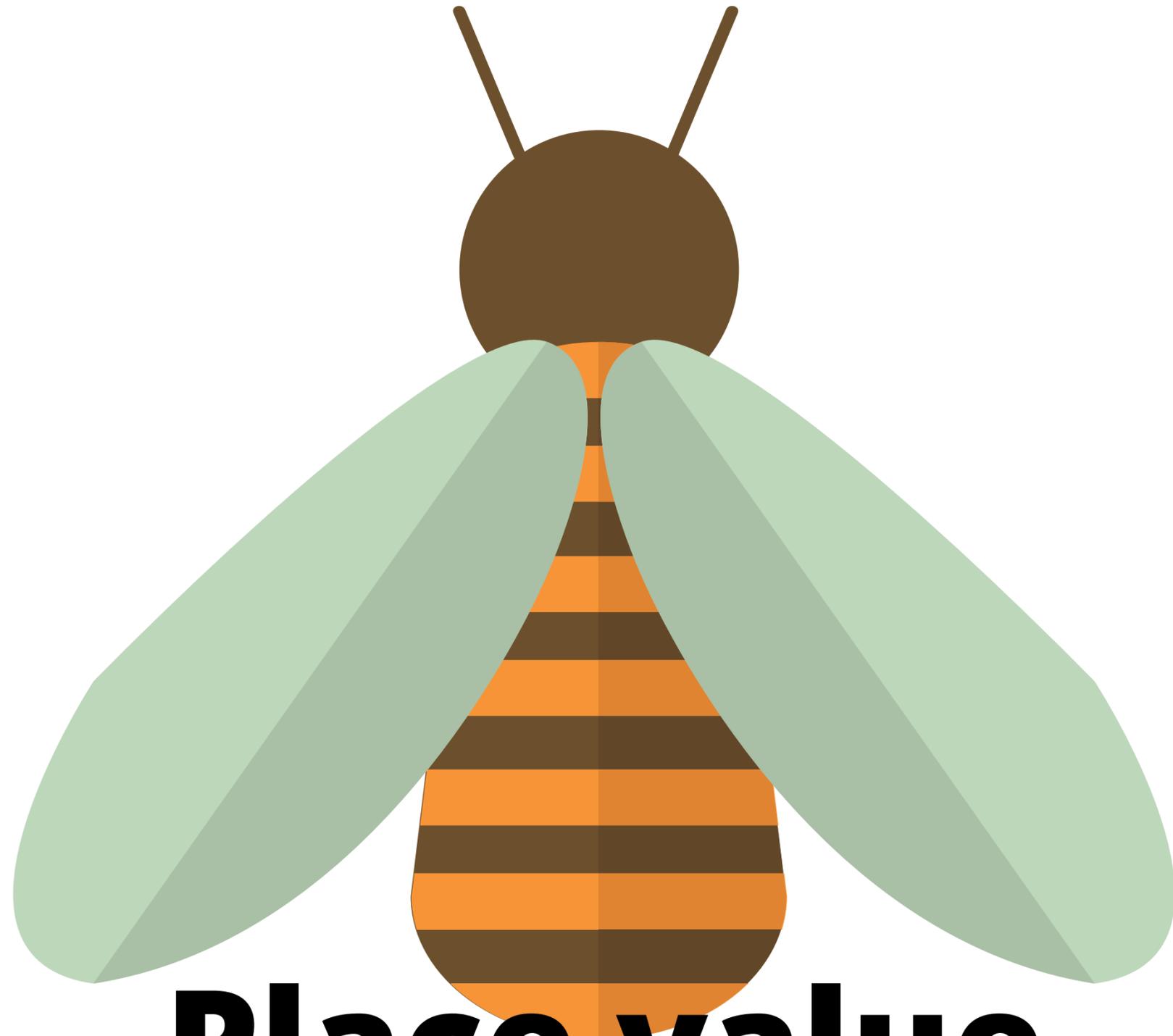
Models and
images

Year 6 displays.

Representations

Example of display layout





Place value

Ones

Tens

Thousands

**Ten
thousands**

**Hundred
thousands**

Millions

**Place
value**

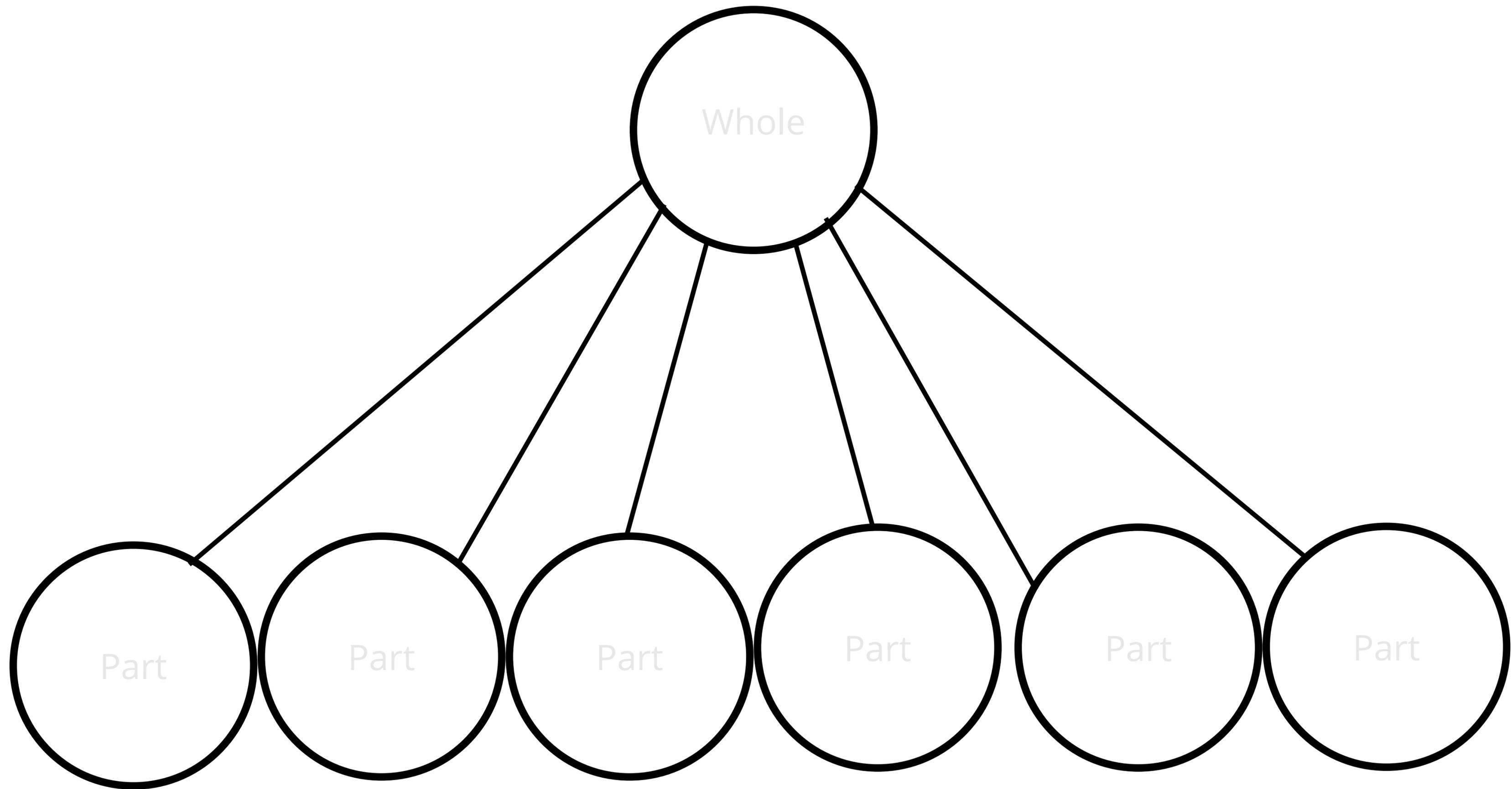
Represents

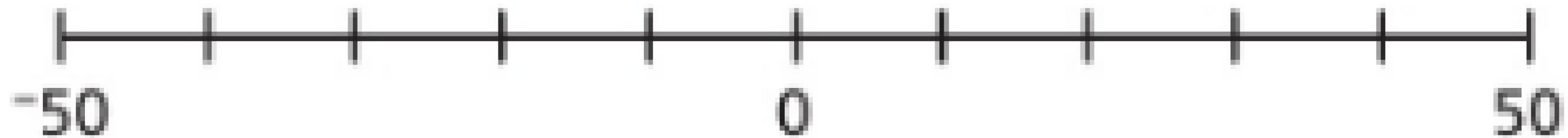
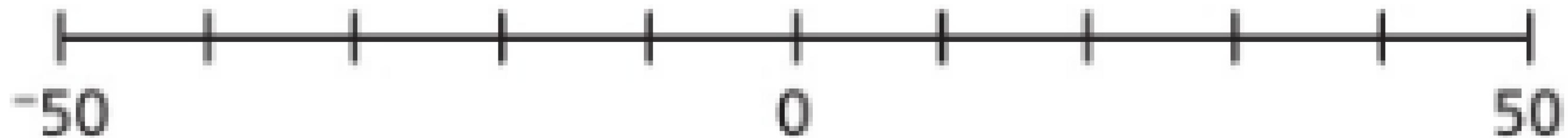
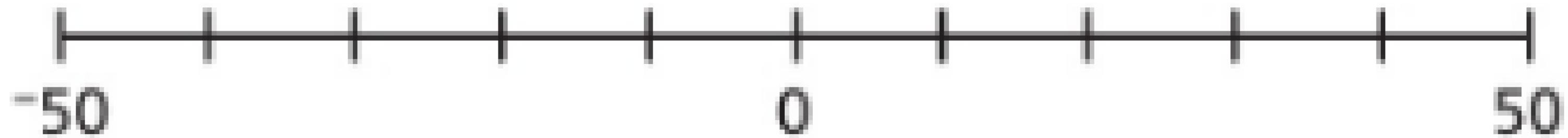
Interval

Positive

Negative

Round





100000	200000	300000	400000	500000	600000	700000	800000	900000	1000000
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	200000	300000	400000	500000	600000	700000	800000	900000	1000000
--	---------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------	----------------

100000		300000	400000	500000	600000	700000	800000	900000	1000000
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100000	200000		400000	500000	600000	700000	800000	900000	1000000
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100000	200000	300000		500000	600000	700000	800000	900000	1000000
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100000	200000	300000	400000		600000	700000	800000	900000	1000000
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100000	200000	300000	400000	500000		700000	800000	900000	1000000
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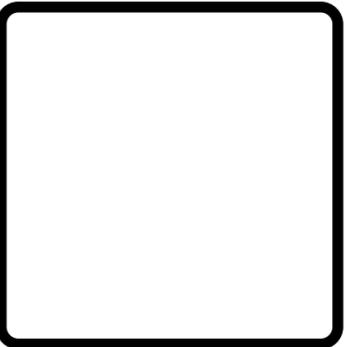
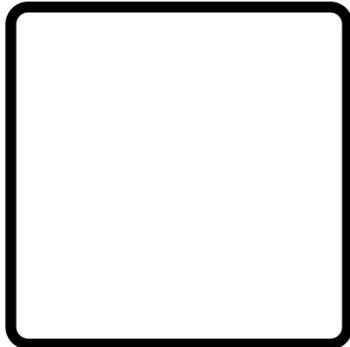
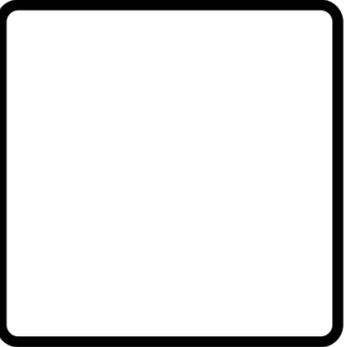
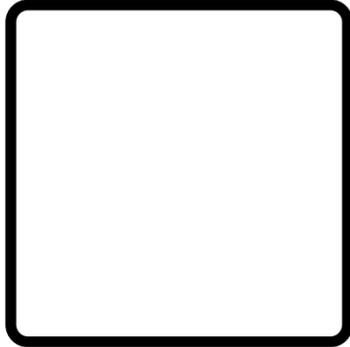
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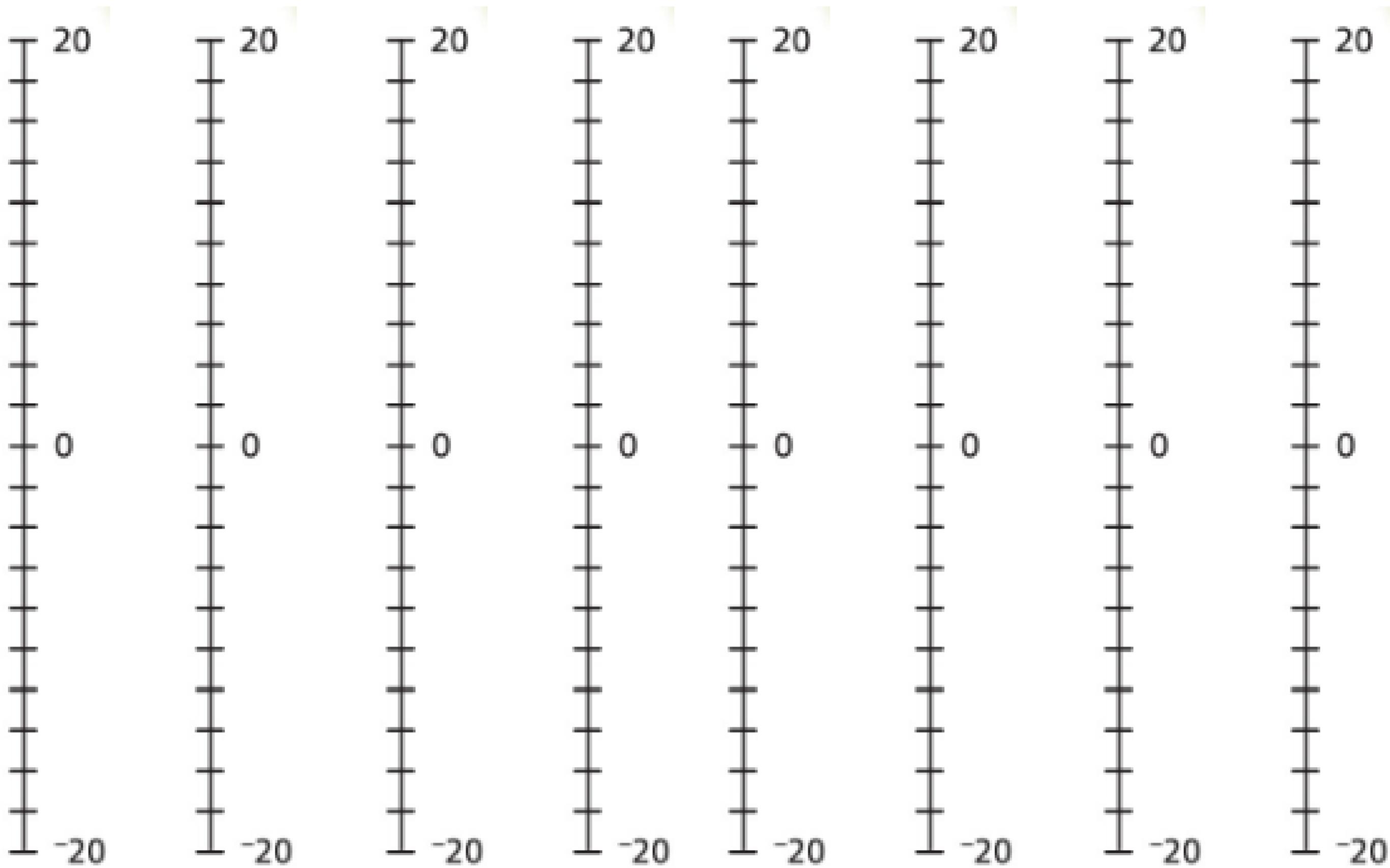
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---------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------	--	----------------

Rounding

100,000	10,000	1,000	100	10

Rounding







Four operations

Addition

Total

**Place
value**

Column

Addition

Subtraction

Factor

**Common
factor**

**Long
division**

Remainder

Estimate

Multiple

**Common
multiple**

Prime

Composite

Squared

Cubed

**Order of
operations**

Whole

Part

Part

Whole

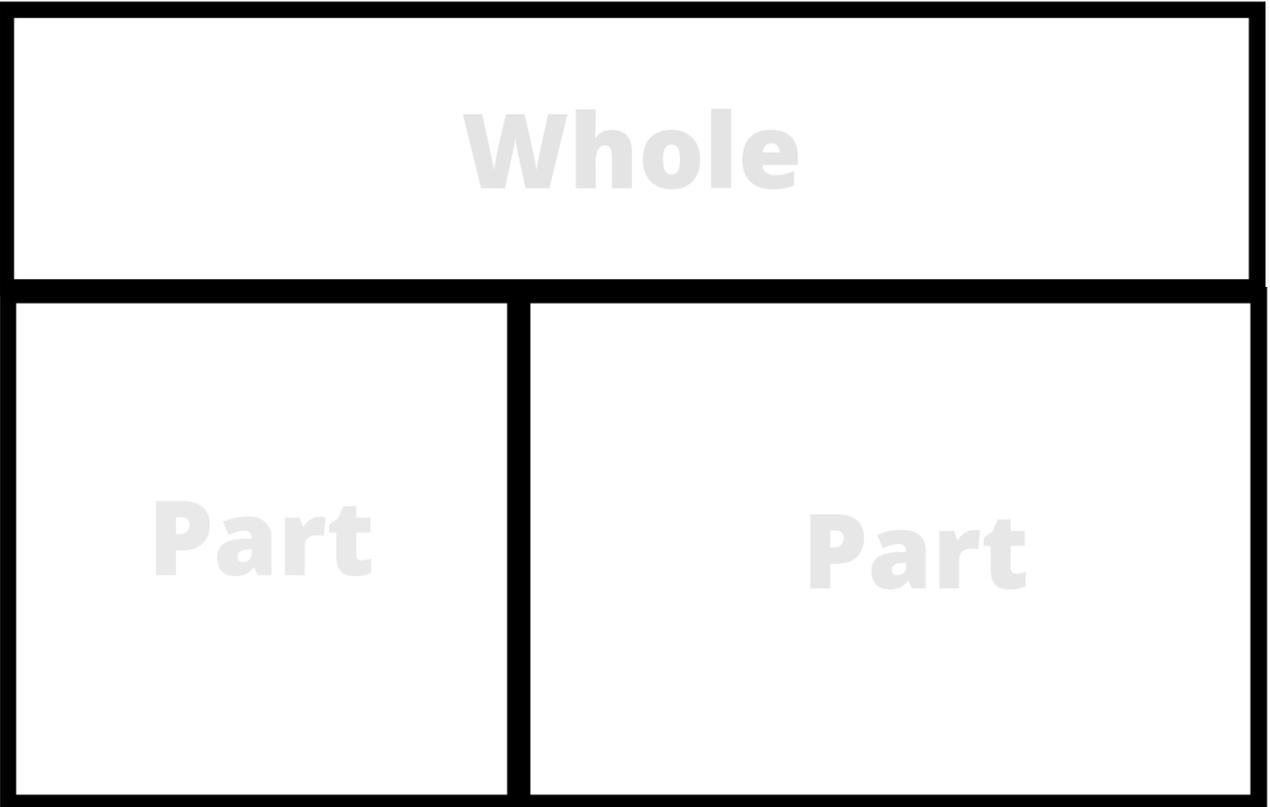
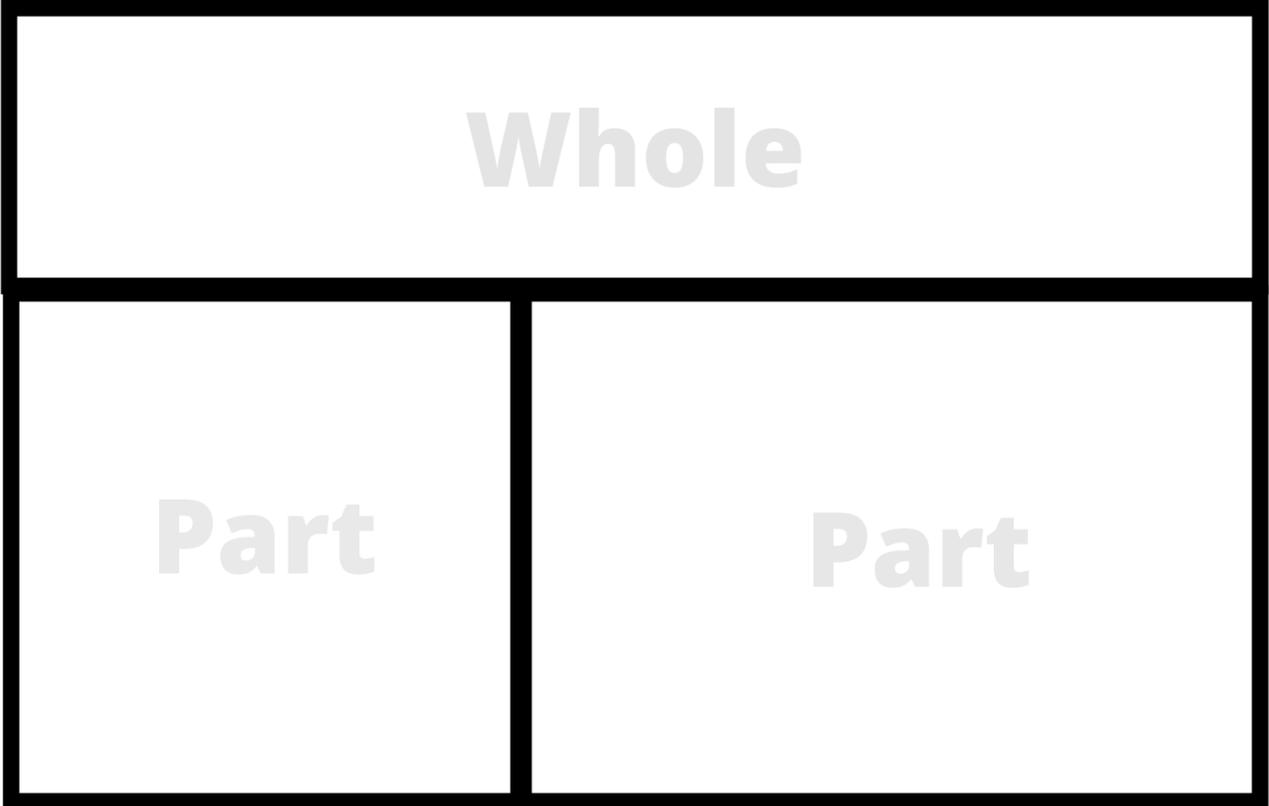
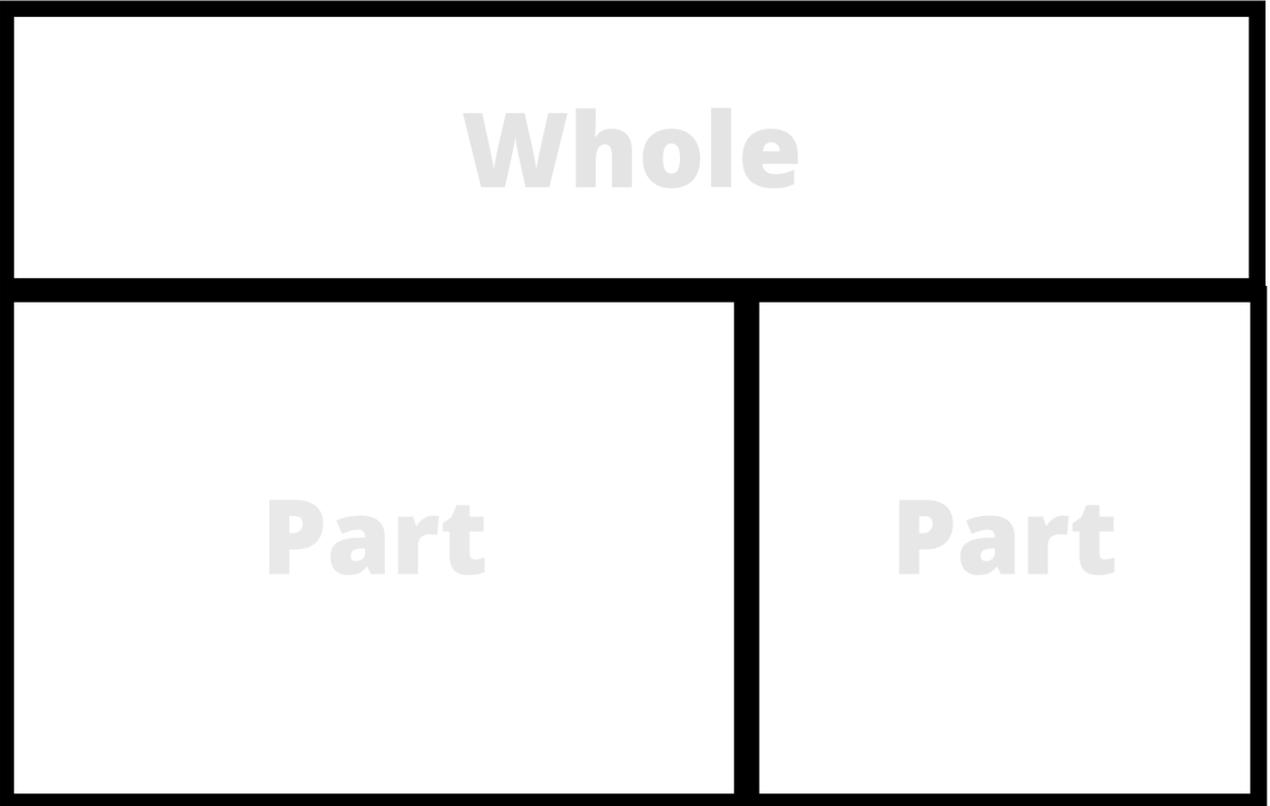
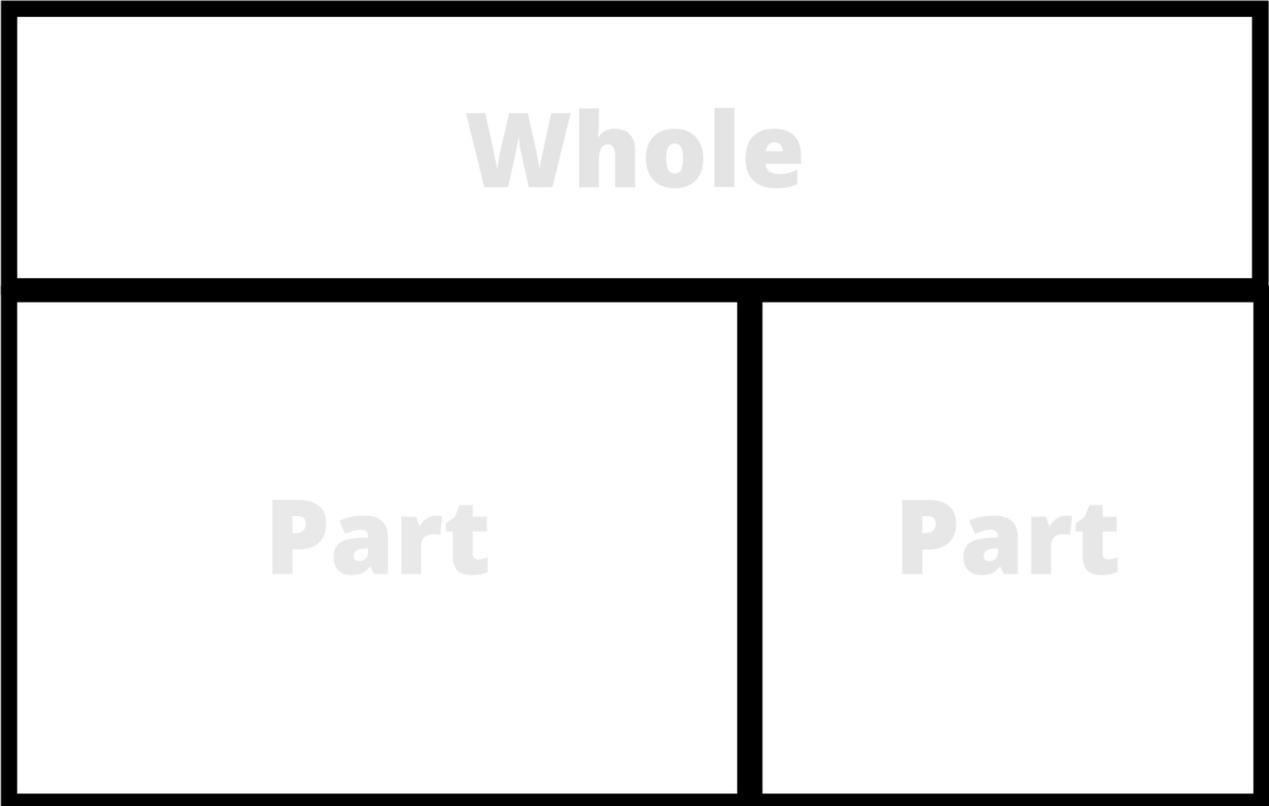
Part

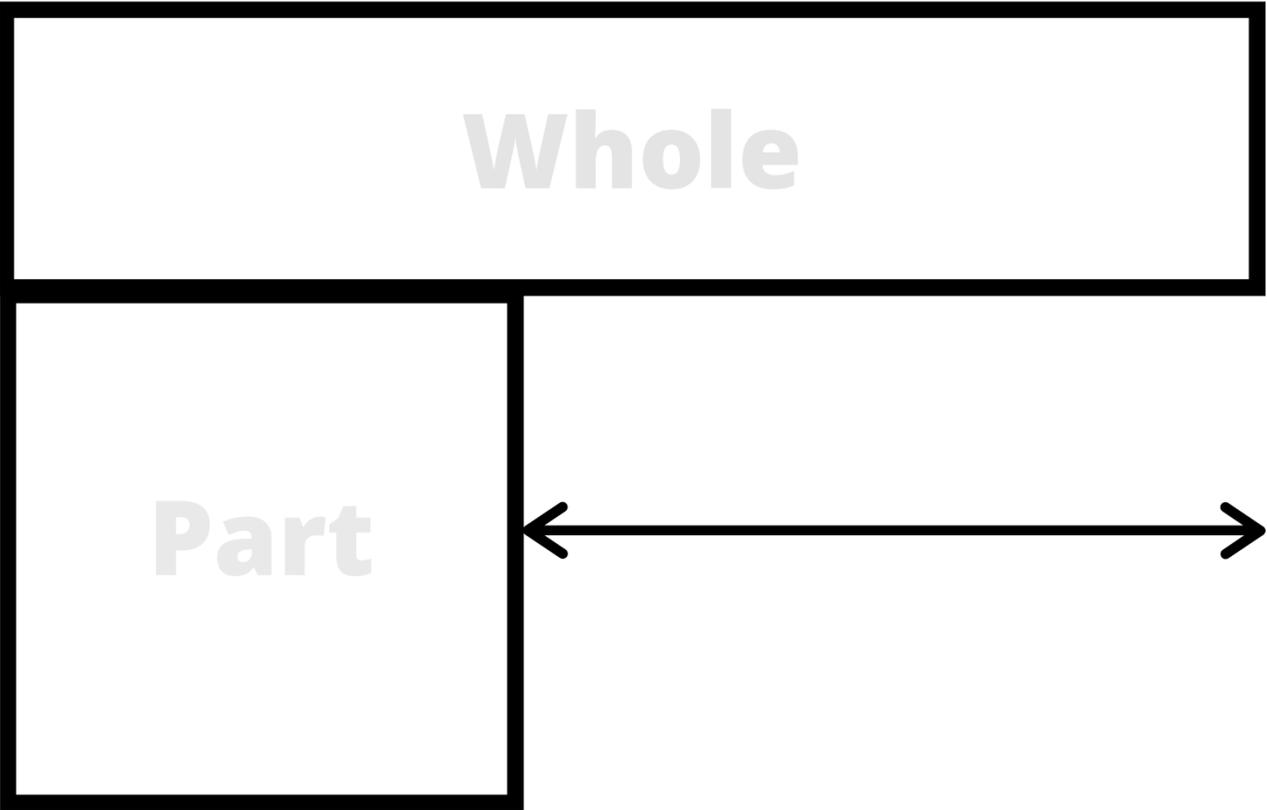
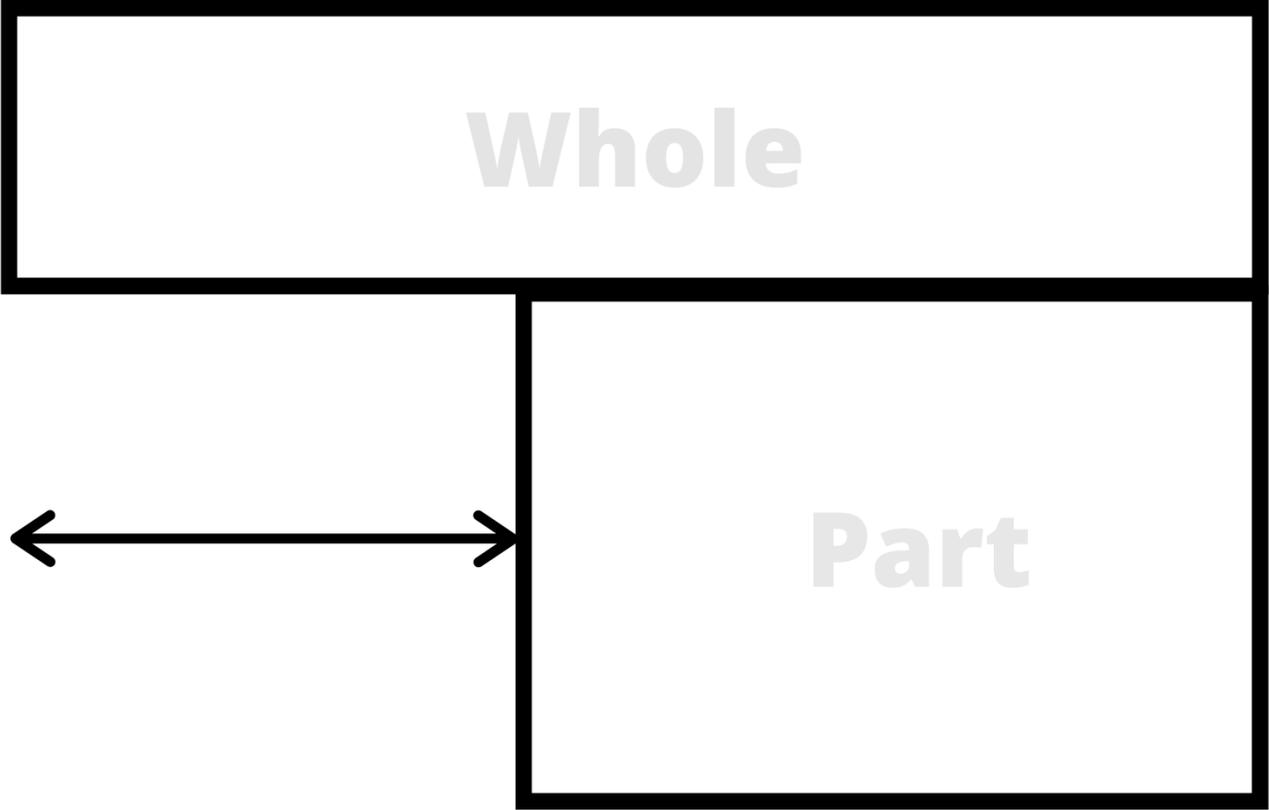
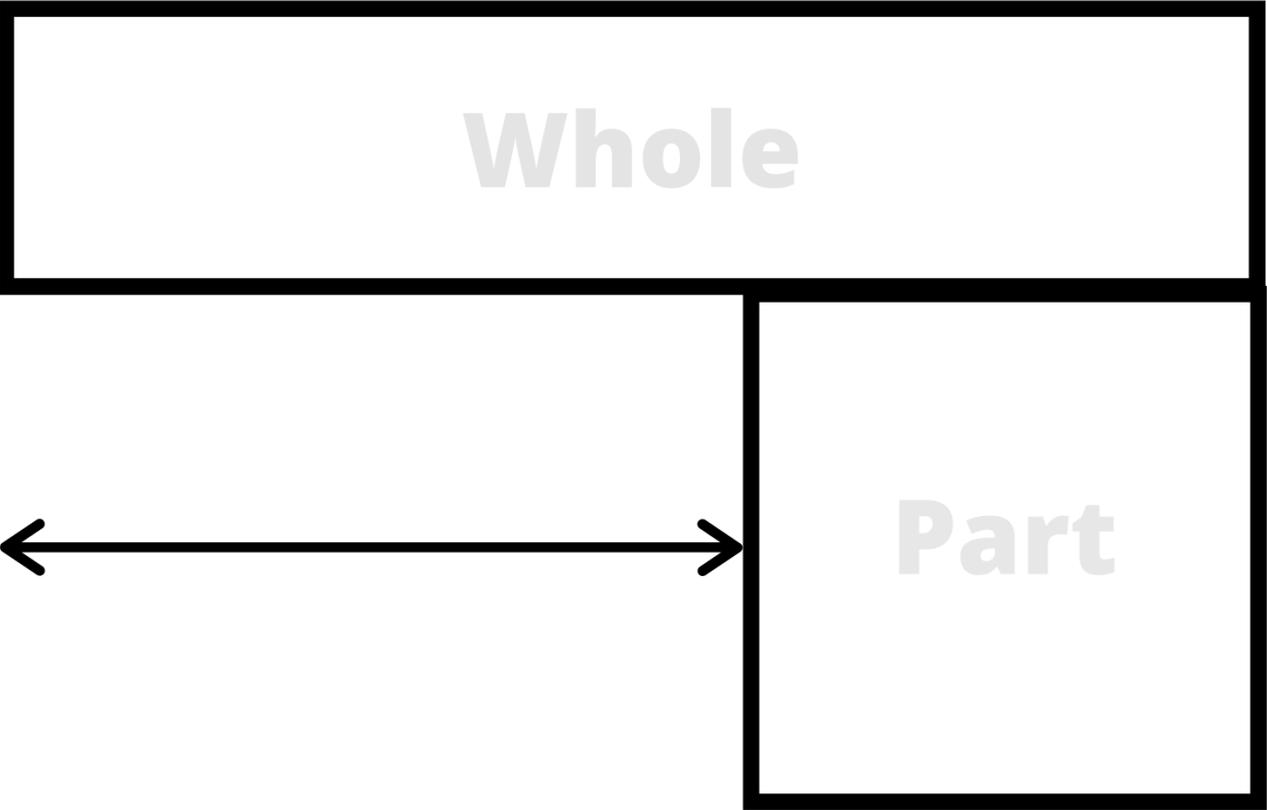
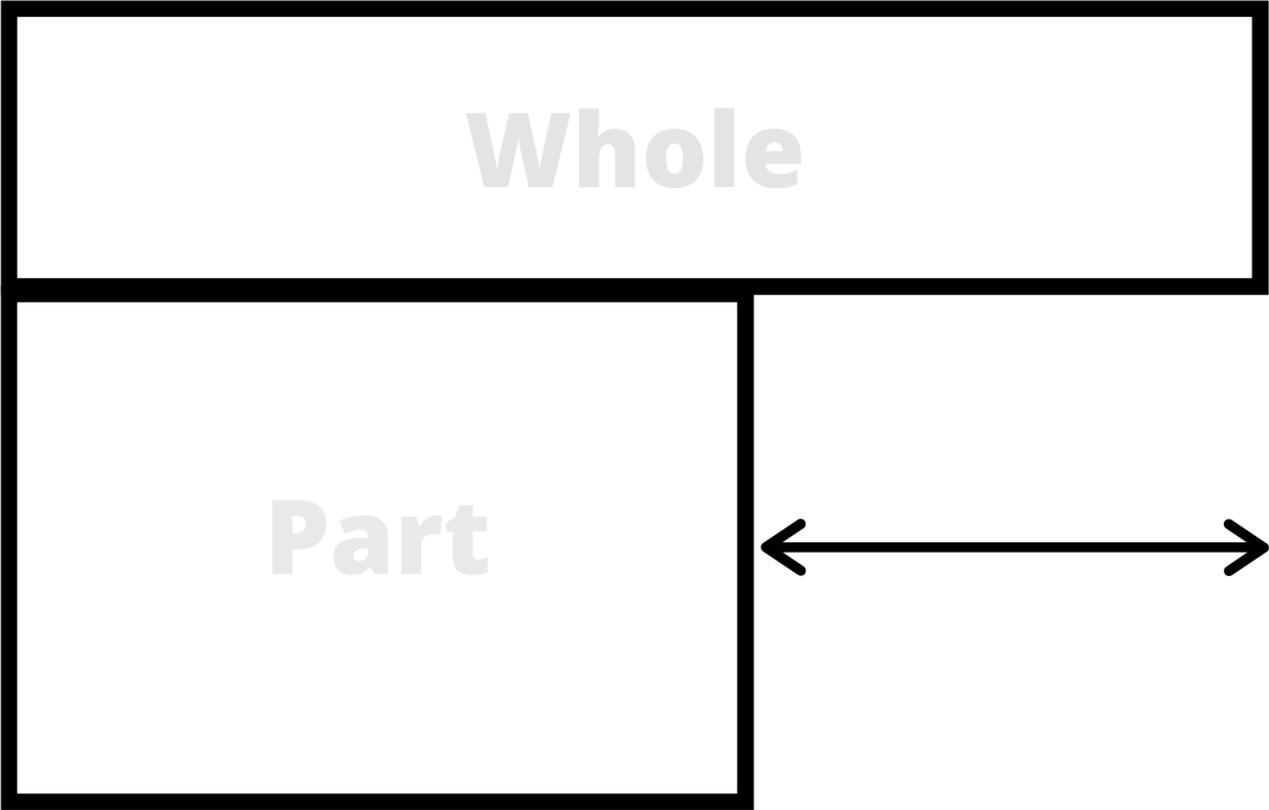
Part

Whole

Part







+

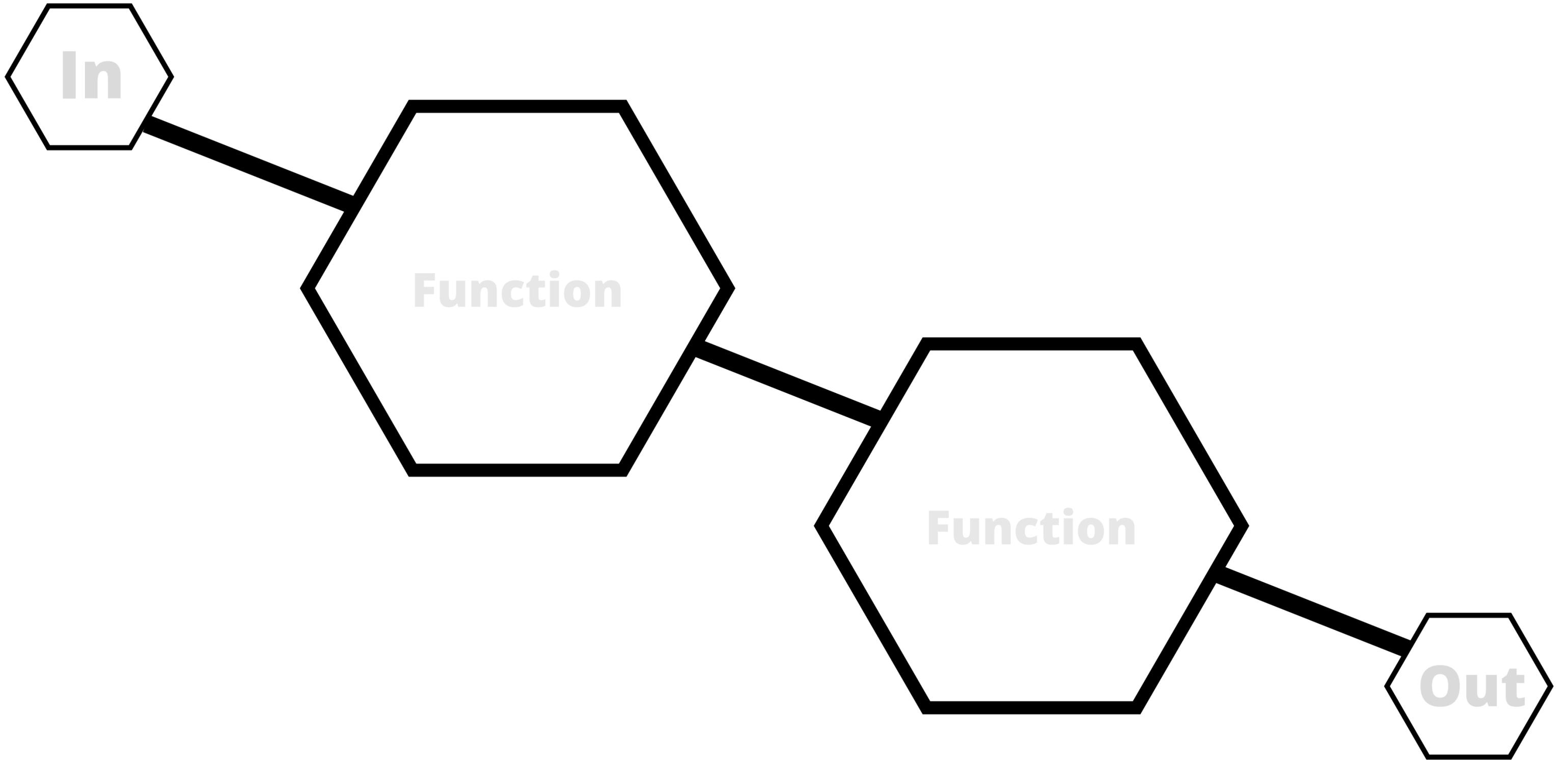
Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
Part	Part	Part	Part	Part	Part
Part	Part	Part	Part	Part	Part



Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
Part	Part	Part	Part	Part	Part
Part	Part	Part	Part	Part	Part

-





Digit cards

0

1

2

3

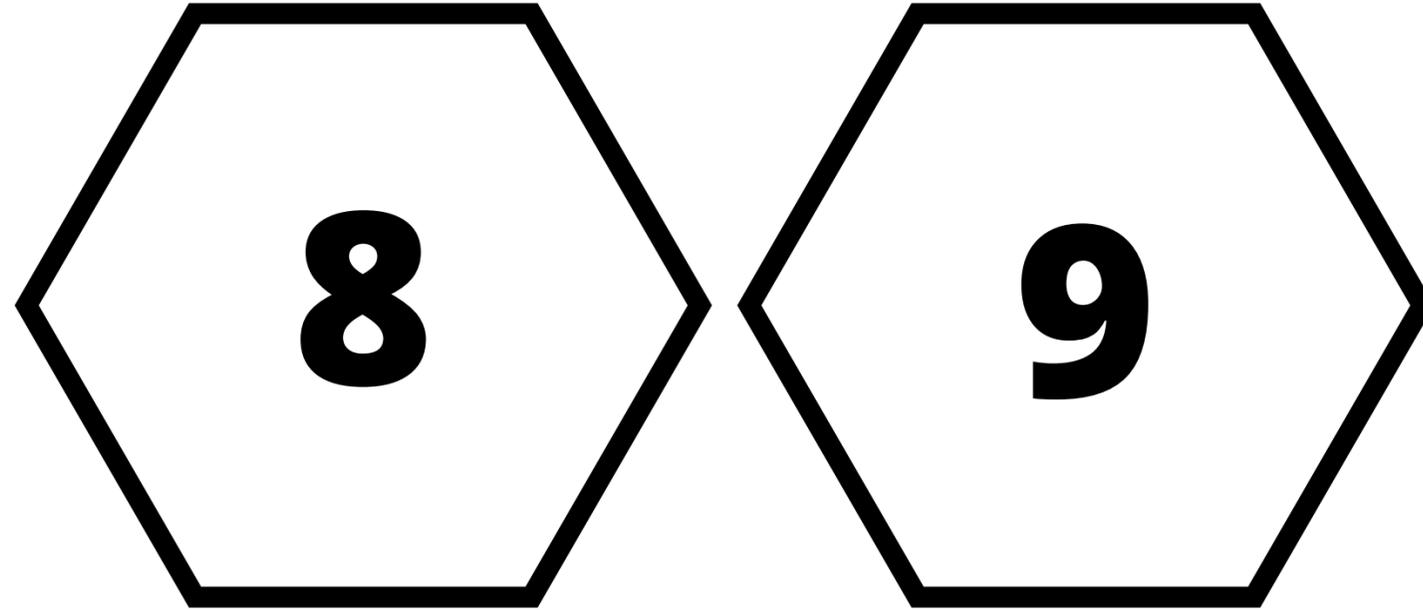
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5

6

7

Digit cards

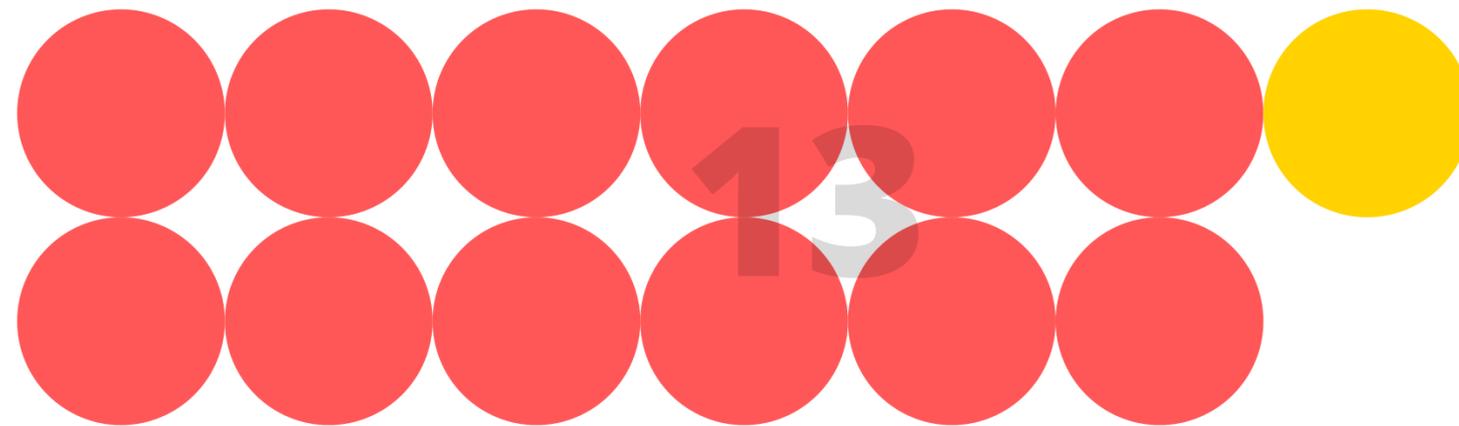
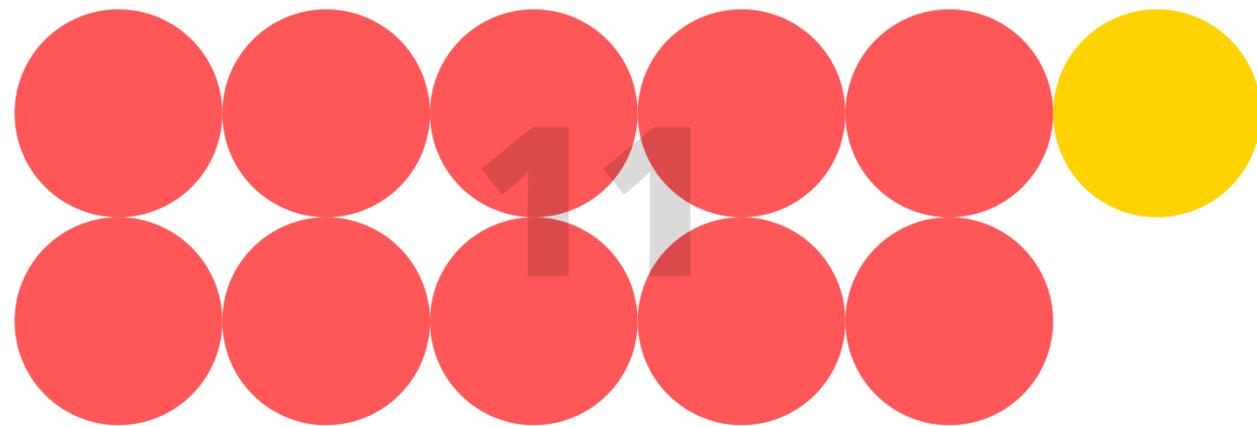
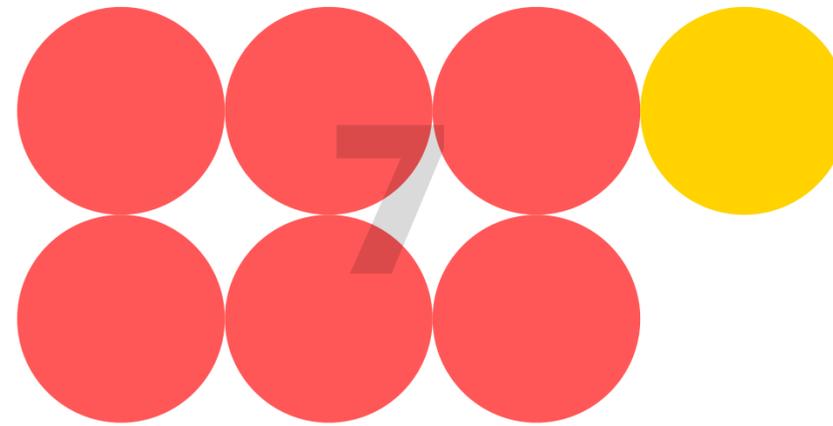
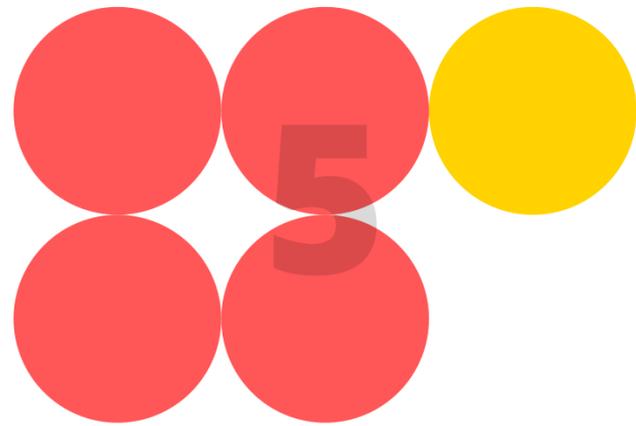
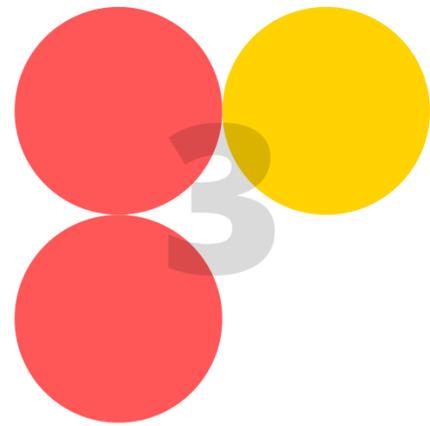


Multiples

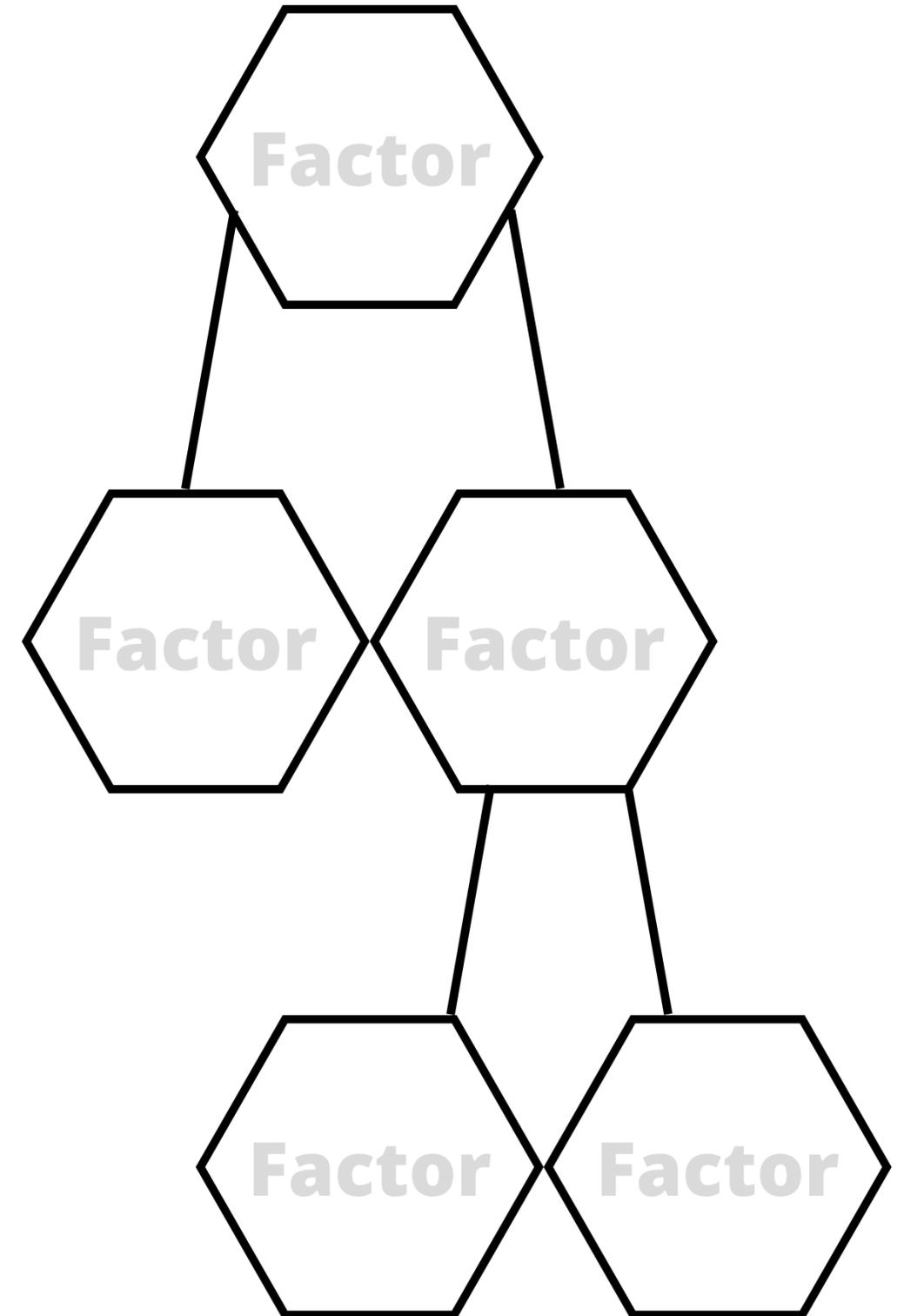
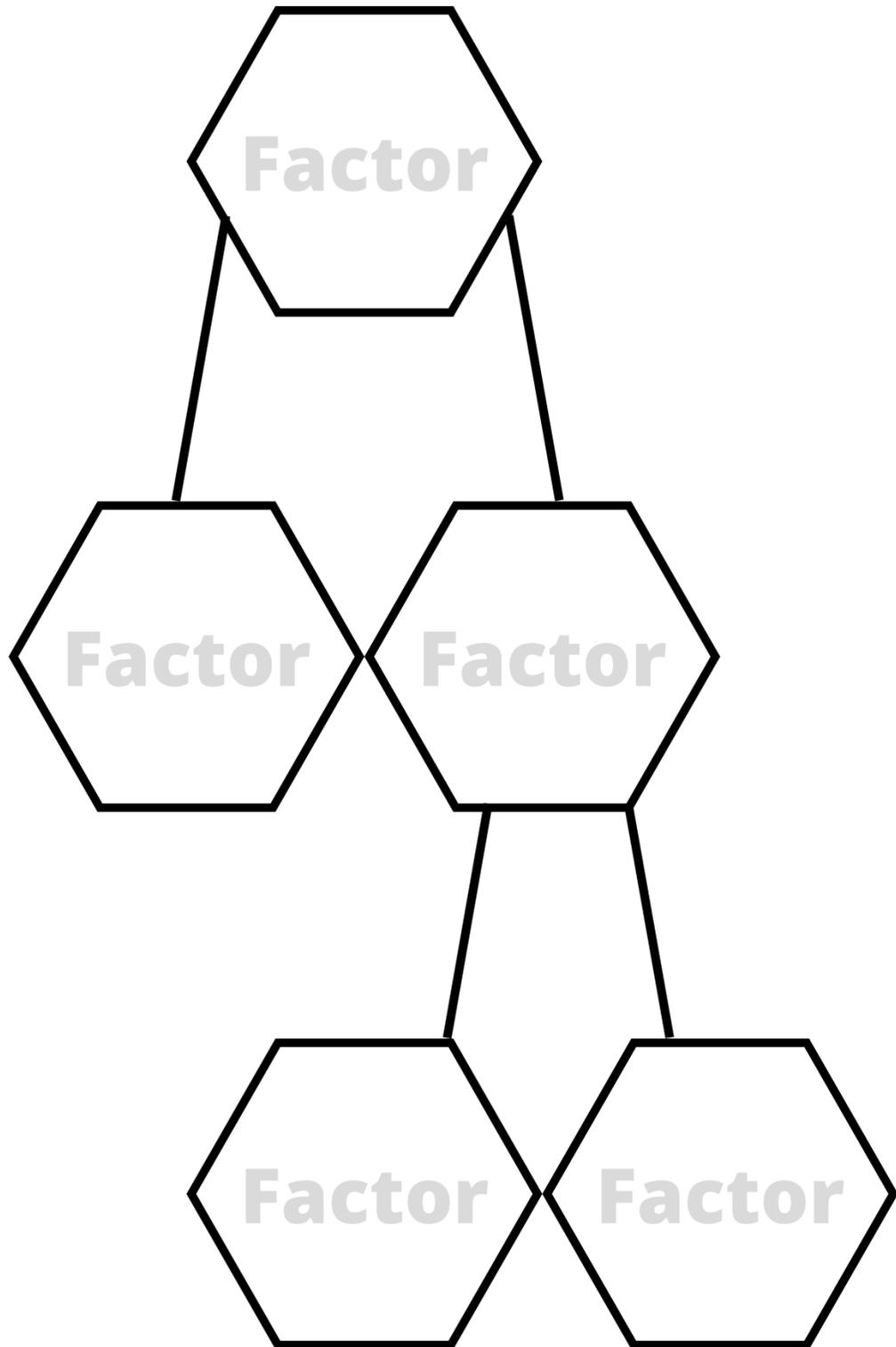
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31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
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81	82	83	84	85	86	87	88	89	90
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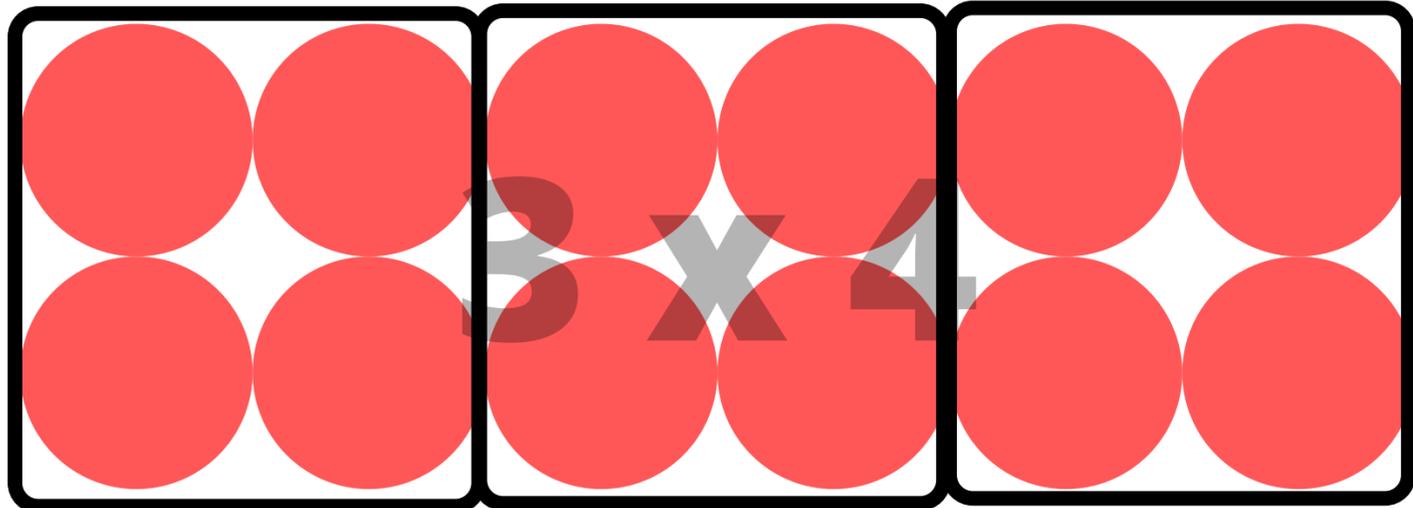
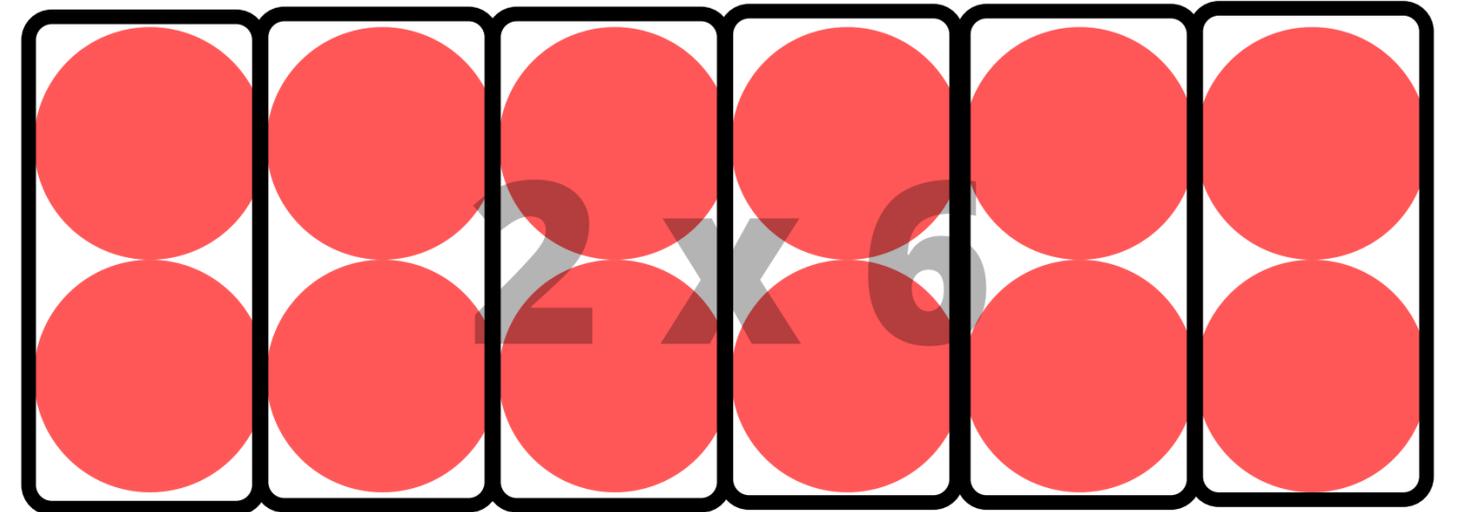
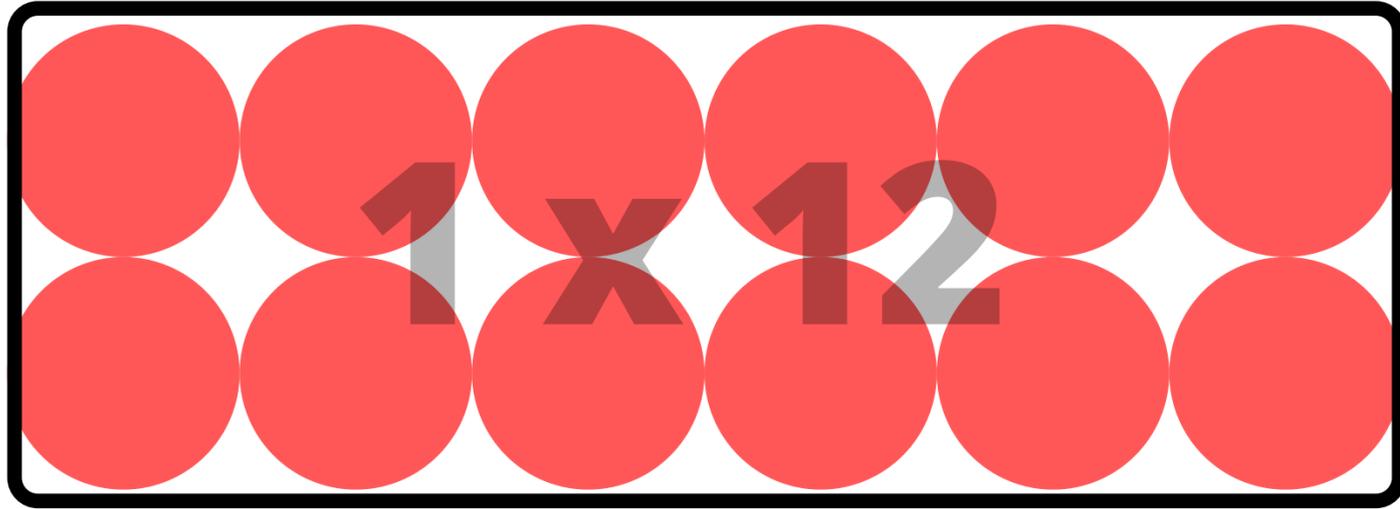
Prime



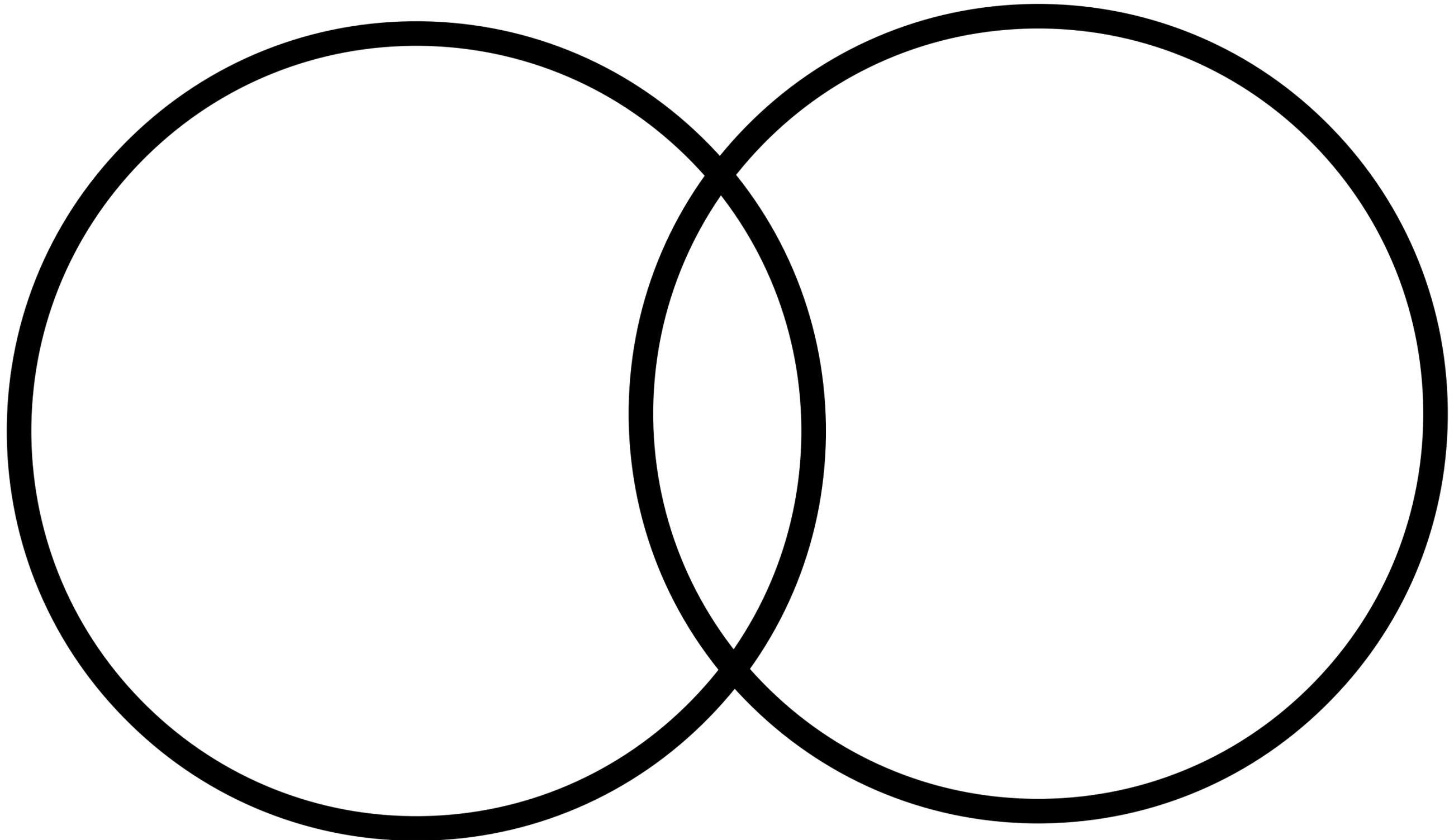
Factor



Common Factors



Common Factors



Square numbers

X	1	2	3	4	5	6	7	8	9	10	11	12
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2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
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10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
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X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
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X	1	2	3	4	5	6	7	8	9	10	11	12
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X	1	2	3	4	5	6	7	8	9	10	11	12
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X	1	2	3	4	5	6	7	8	9	10	11	12
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3	3	6	9	12	15	18	21	24	27	30	33	36
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12	12	24	36	48	60	72	84	96	108	120	132	144

Square numbers

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
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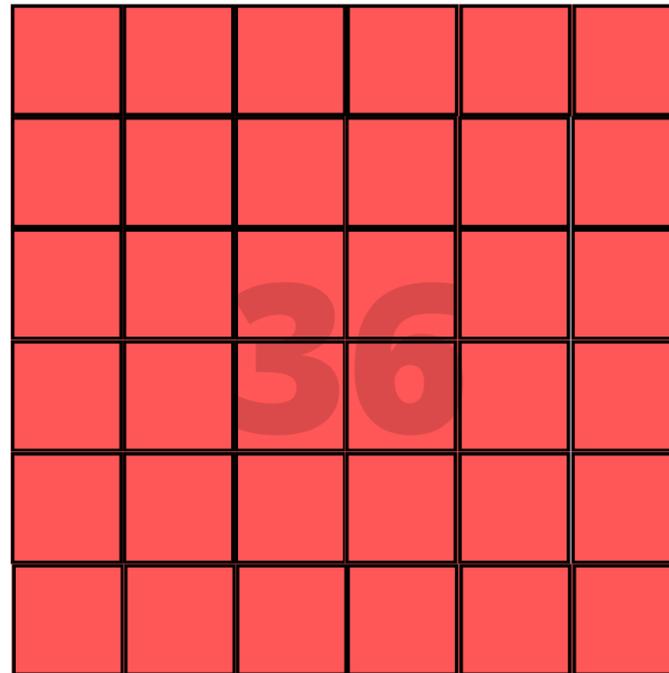
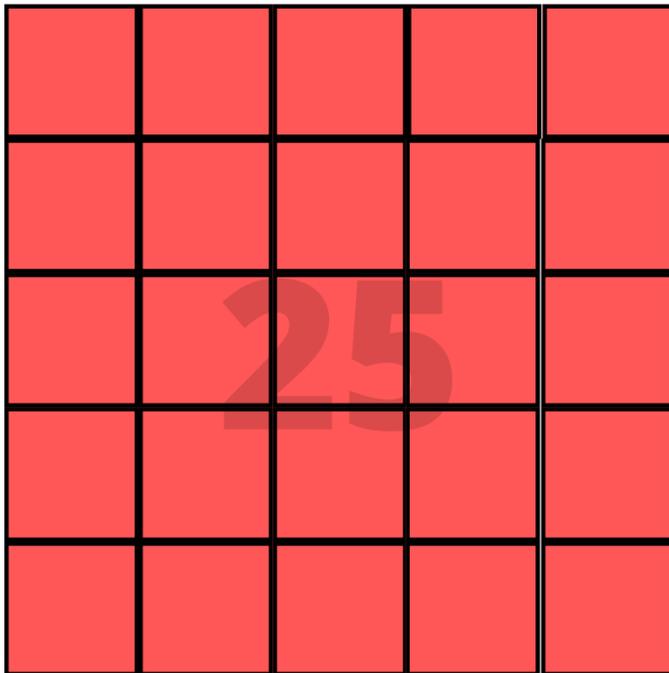
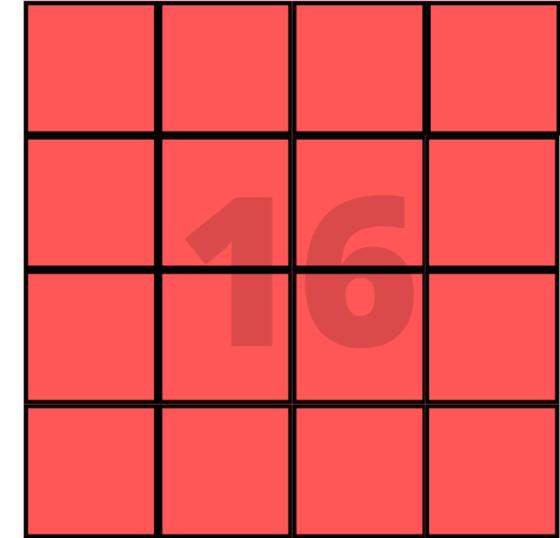
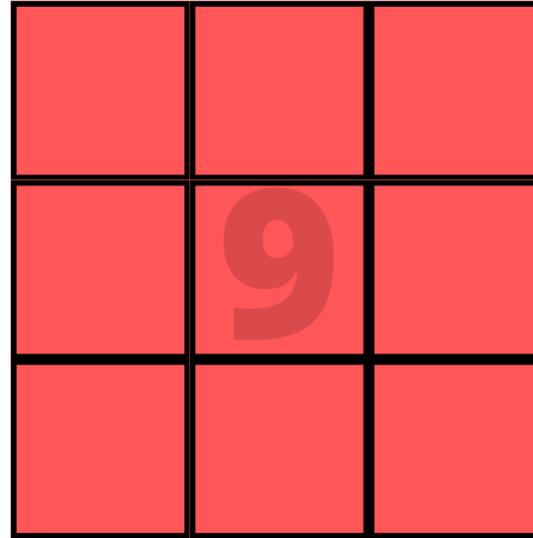
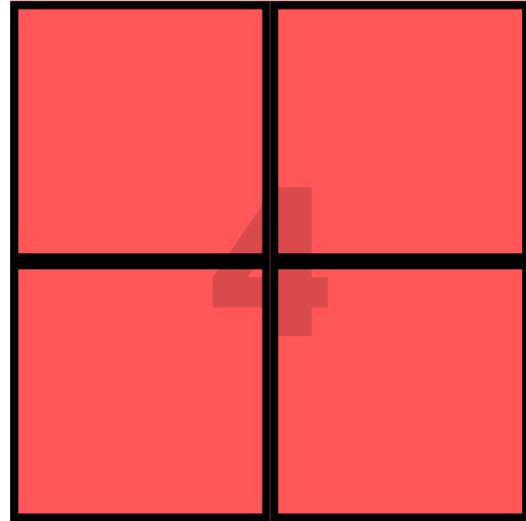
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X	1	2	3	4	5	6	7	8	9	10	11	12
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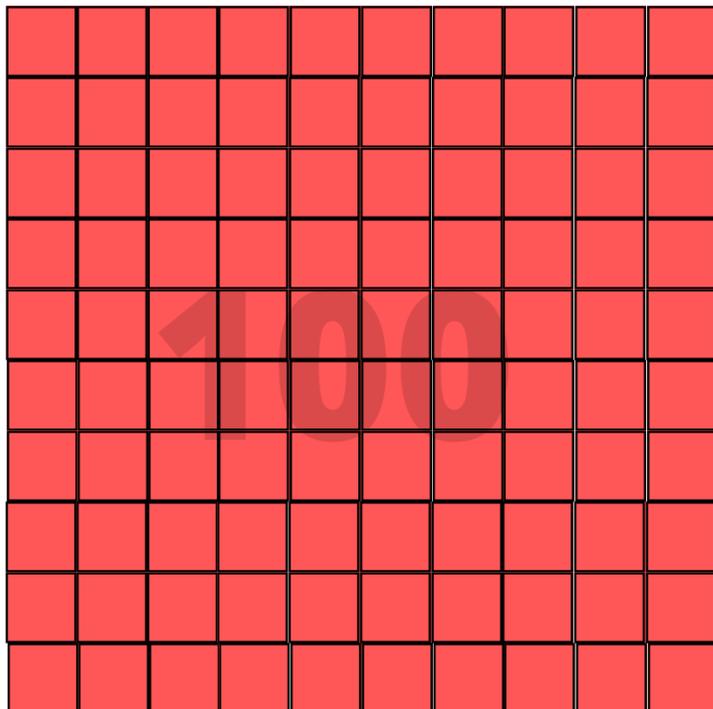
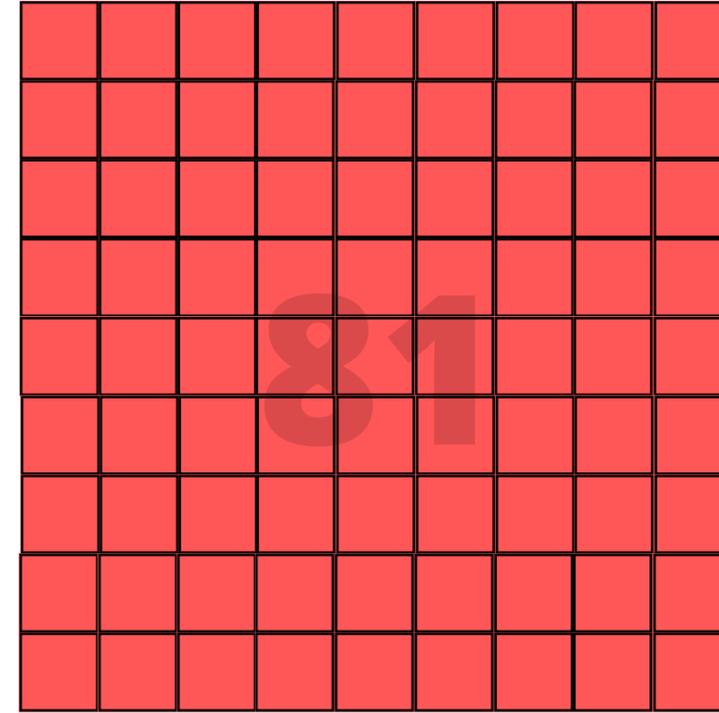
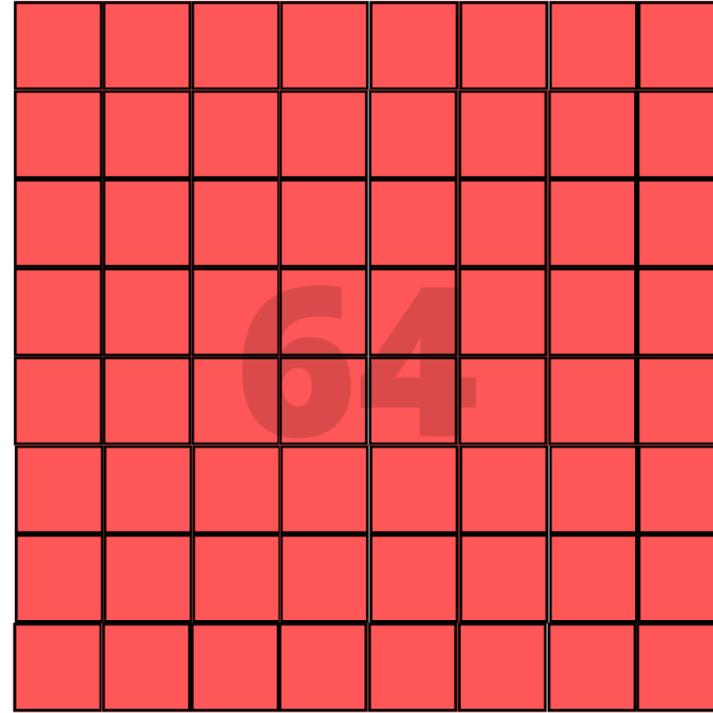
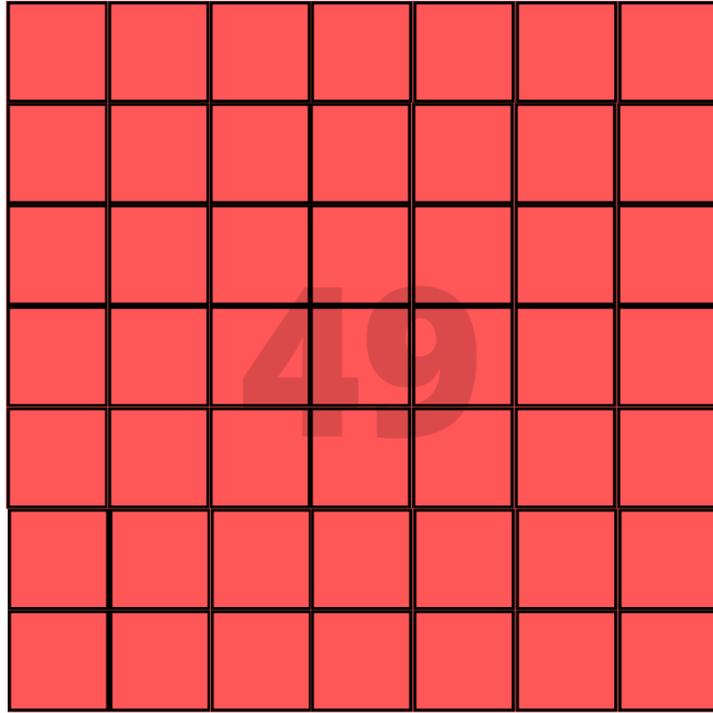
X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

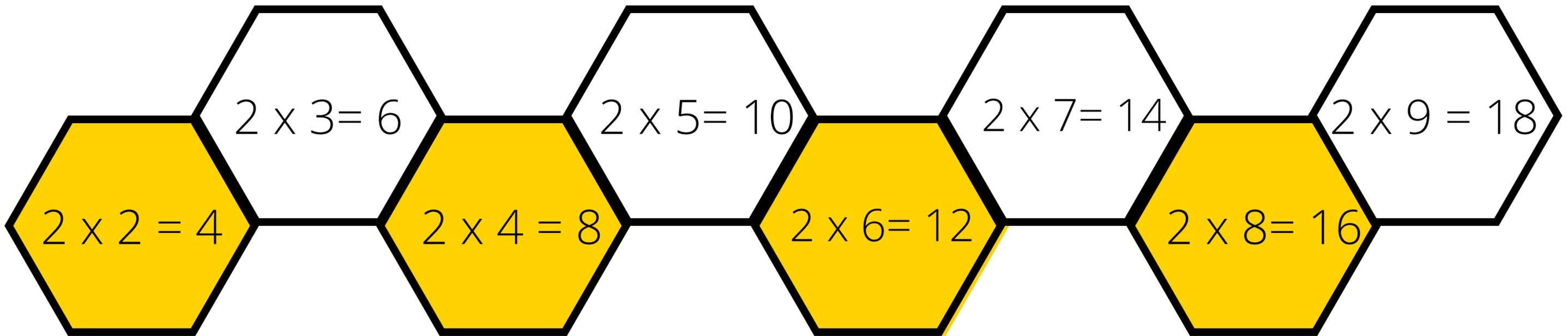
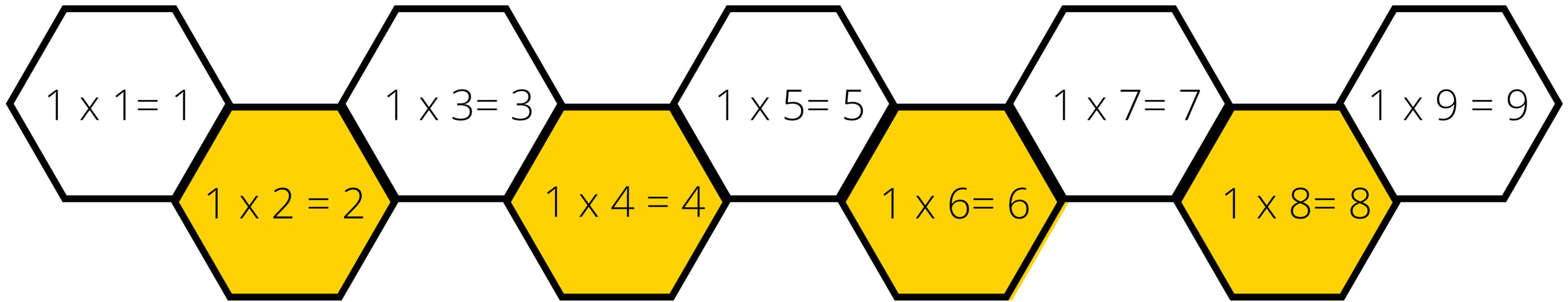
Square numbers

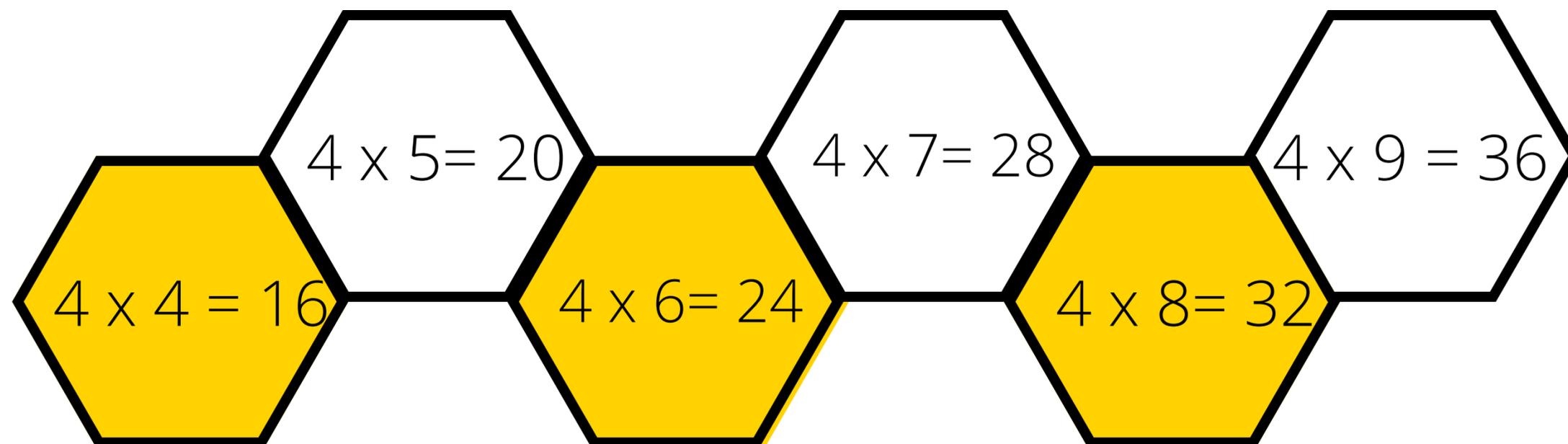
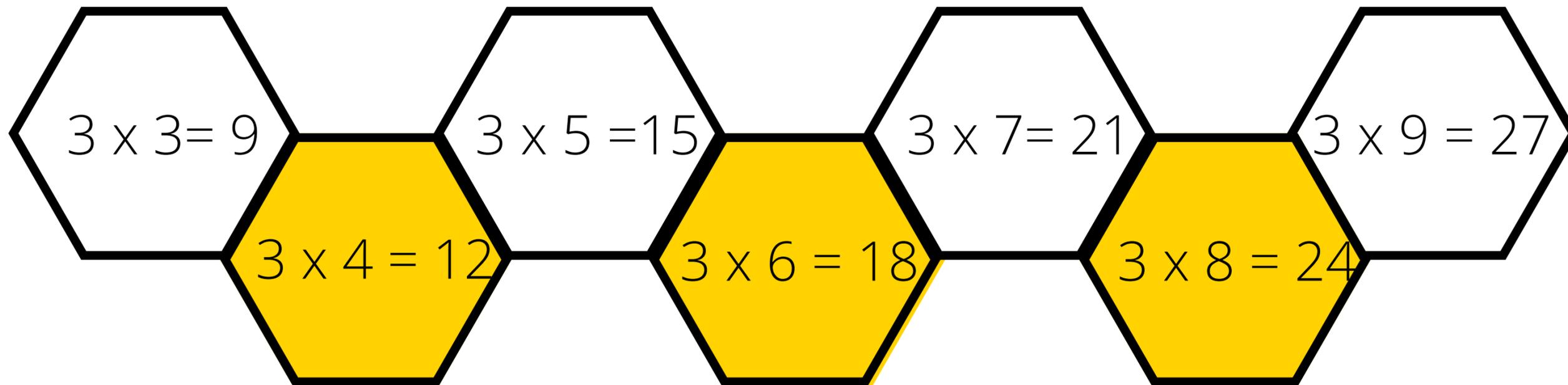


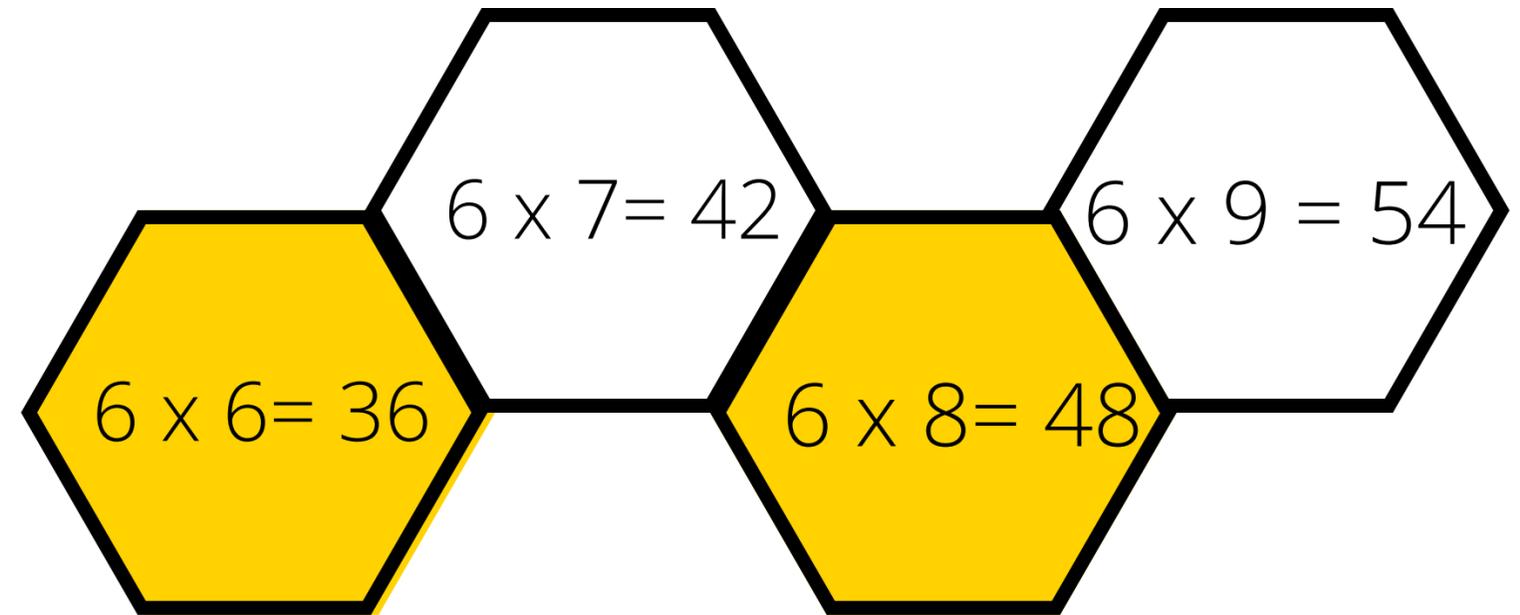
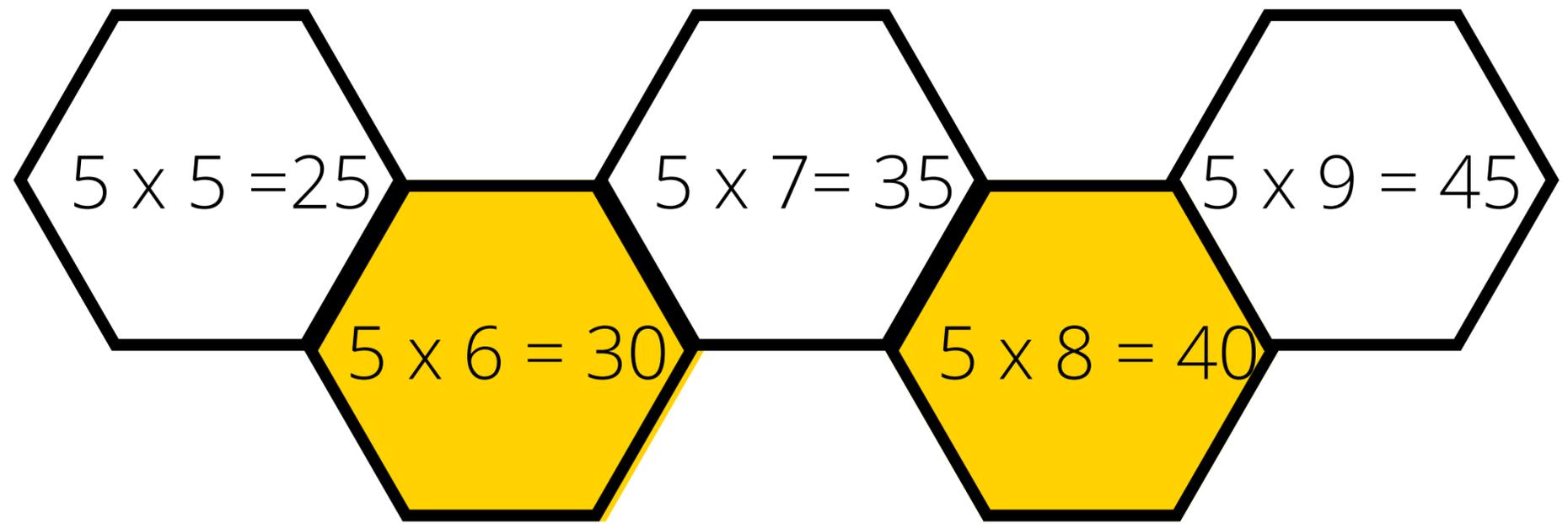
Square numbers

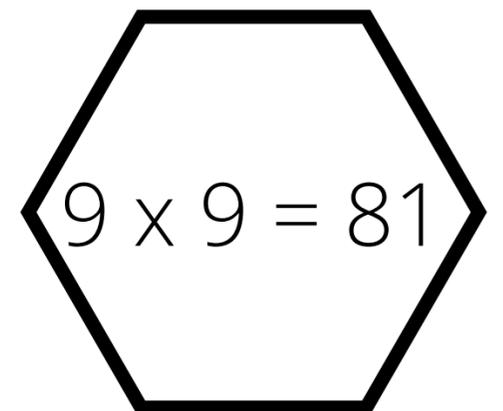
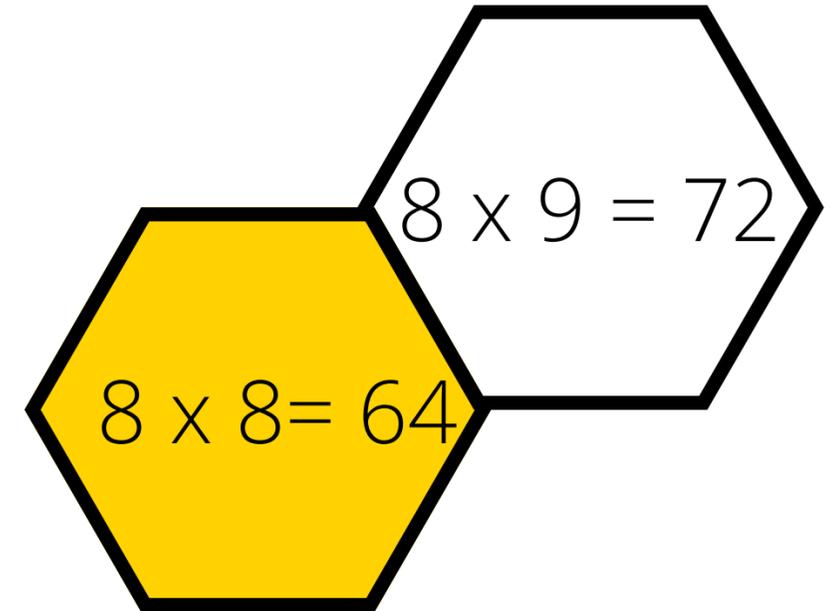
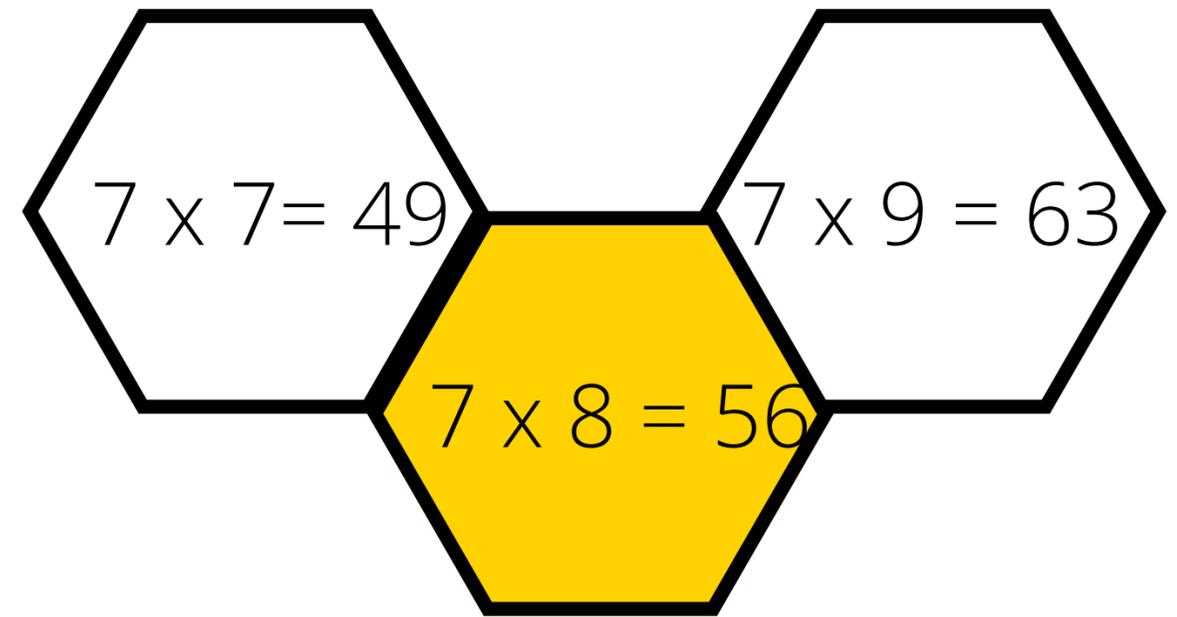


$1 \times 1 = 1$								
$1 \times 2 = 2$	$2 \times 2 = 4$							
$1 \times 3 = 3$	$2 \times 3 = 6$	$3 \times 3 = 9$						
$1 \times 4 = 4$	$2 \times 4 = 8$	$3 \times 4 = 12$	$4 \times 4 = 16$					
$1 \times 5 = 5$	$2 \times 5 = 10$	$3 \times 5 = 15$	$4 \times 5 = 20$	$5 \times 5 = 25$				
$1 \times 6 = 6$	$2 \times 6 = 12$	$3 \times 6 = 18$	$4 \times 6 = 24$	$5 \times 6 = 30$	$6 \times 6 = 36$			
$1 \times 7 = 7$	$2 \times 7 = 14$	$3 \times 7 = 21$	$4 \times 7 = 28$	$5 \times 7 = 35$	$6 \times 7 = 42$	$7 \times 7 = 49$		
$1 \times 8 = 8$	$2 \times 8 = 16$	$3 \times 8 = 24$	$4 \times 8 = 32$	$5 \times 8 = 40$	$6 \times 8 = 48$	$7 \times 8 = 56$	$8 \times 8 = 64$	
$1 \times 9 = 9$	$2 \times 9 = 18$	$3 \times 9 = 27$	$4 \times 9 = 36$	$5 \times 9 = 45$	$6 \times 9 = 54$	$7 \times 9 = 63$	$8 \times 9 = 72$	$9 \times 9 = 81$









Th	H	T	O

X

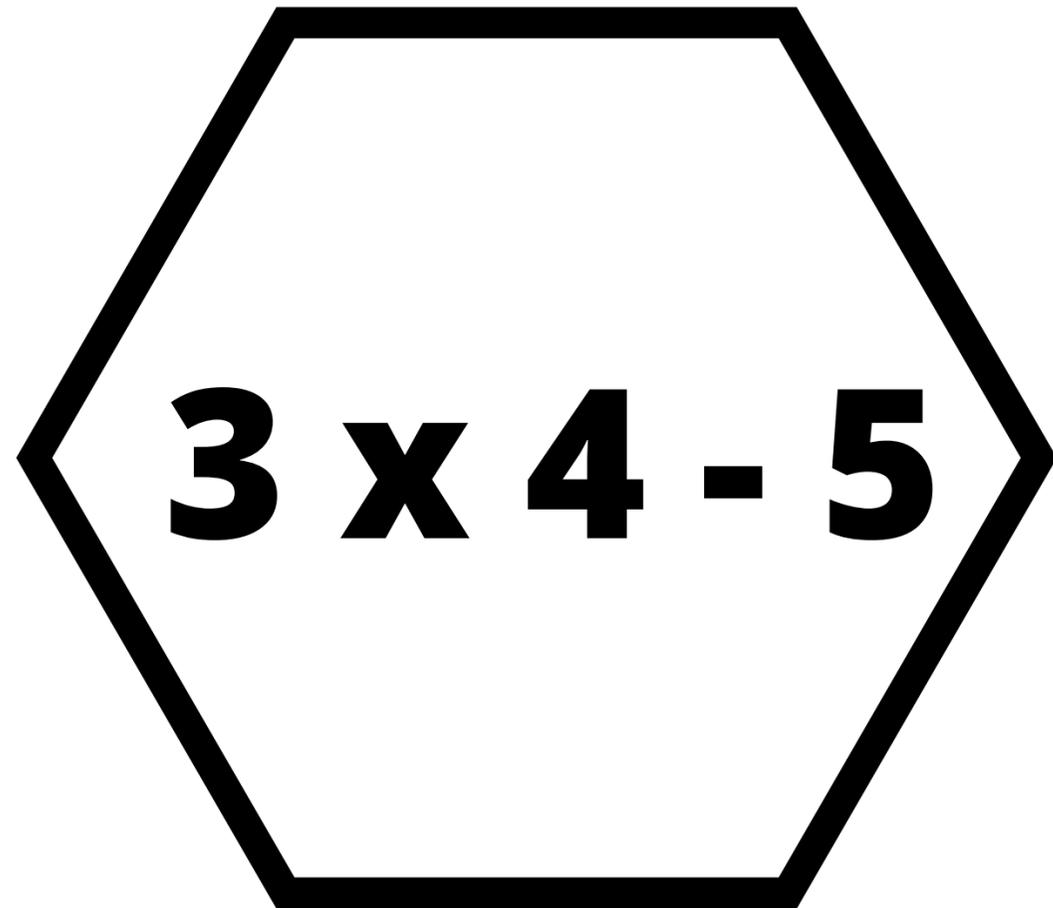


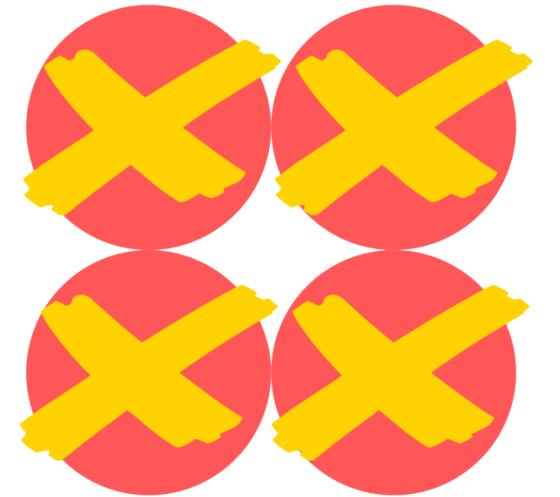
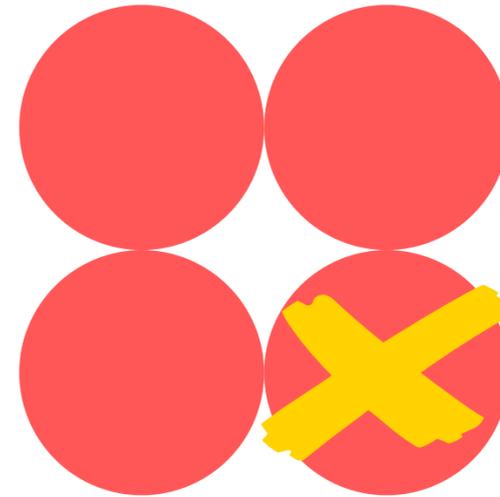
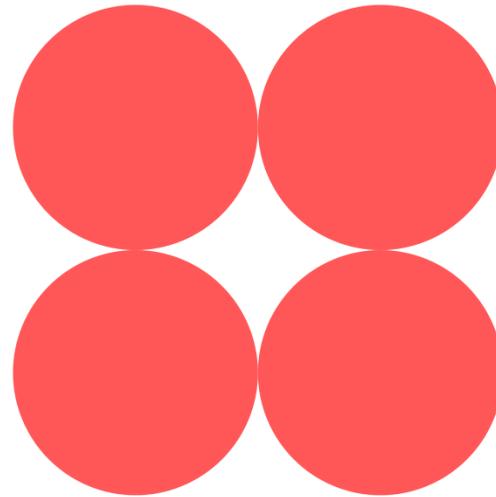
Quotient

Divisor

dividend

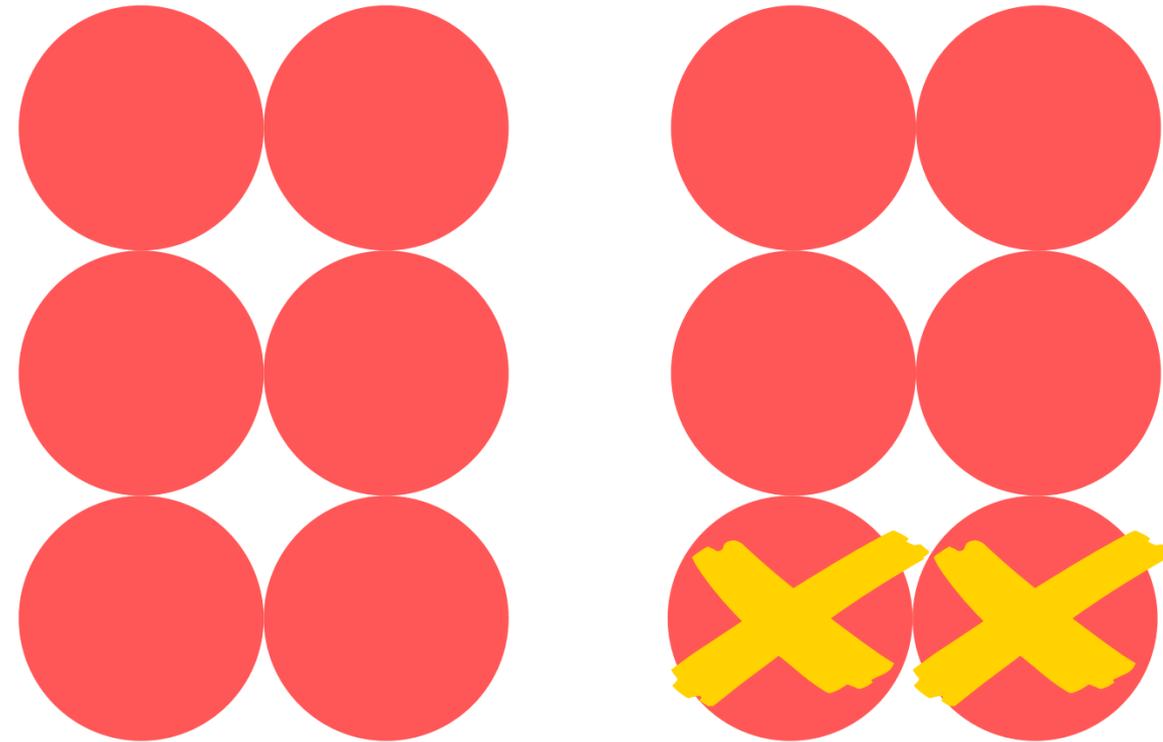
Order of operations

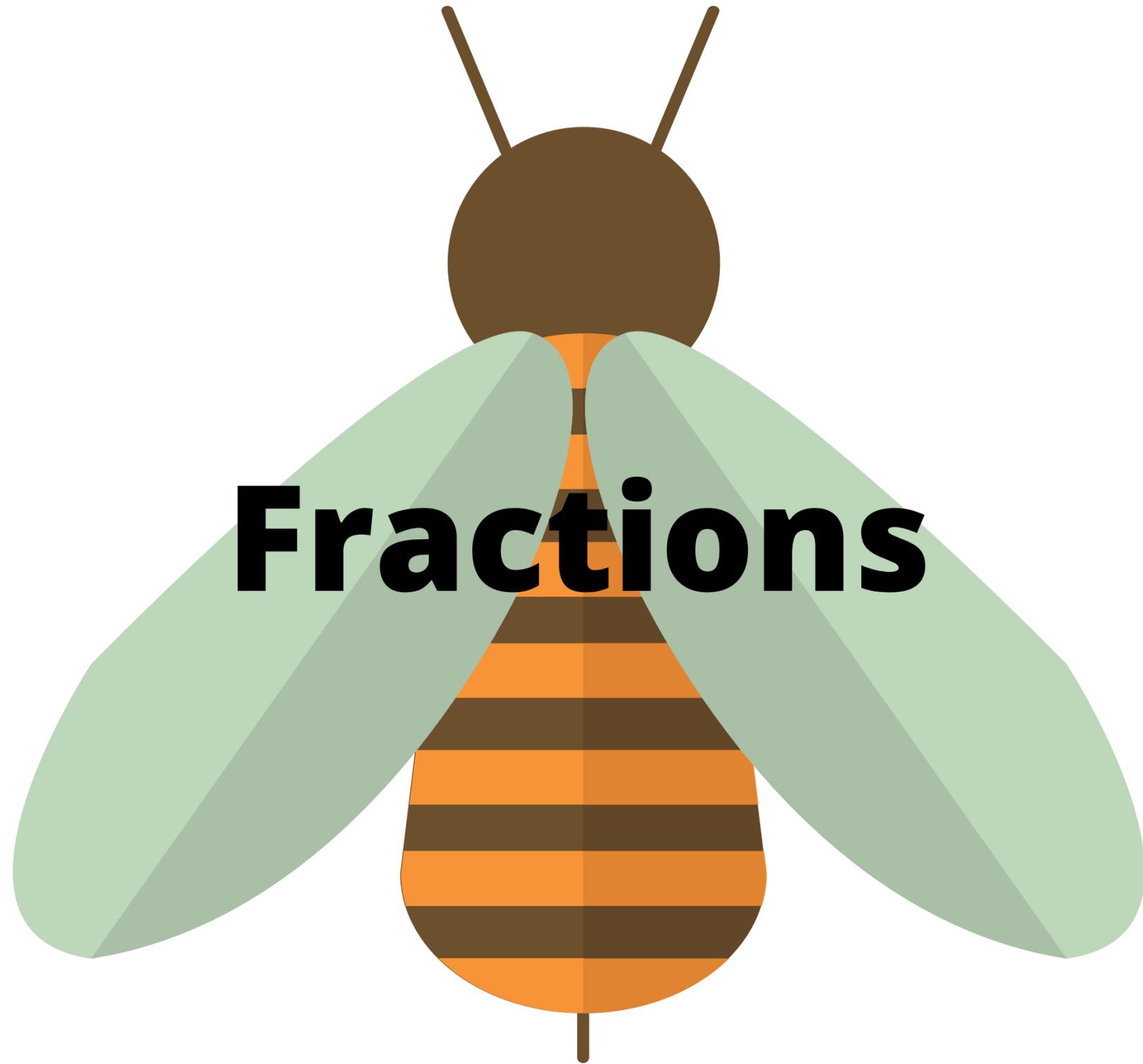

$$3 \times 4 - 5$$



Order of operations

$$2 \times 6 - 2$$





Fractions

Part

Whole

Numerator

Denominator

Simplify

Fraction

Improper

**Mixed
number**

Convert

Sequence

Order

Expand

**Lowest common
denominator**

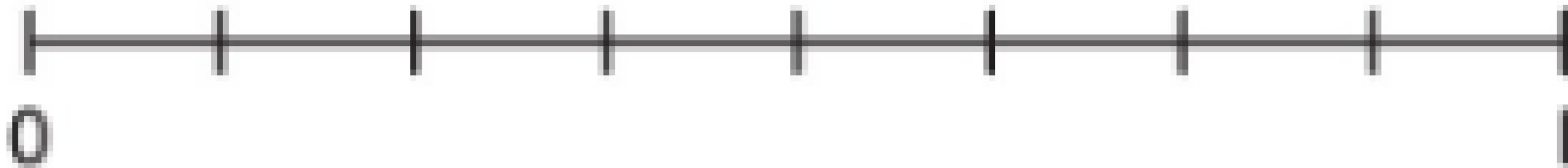
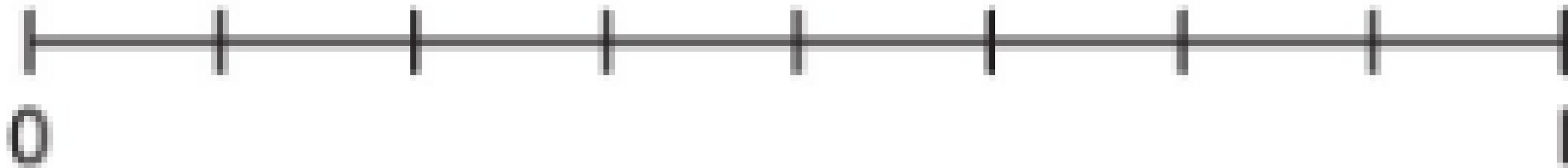
Equivalent

**Division
bar**

**Unit
fraction**

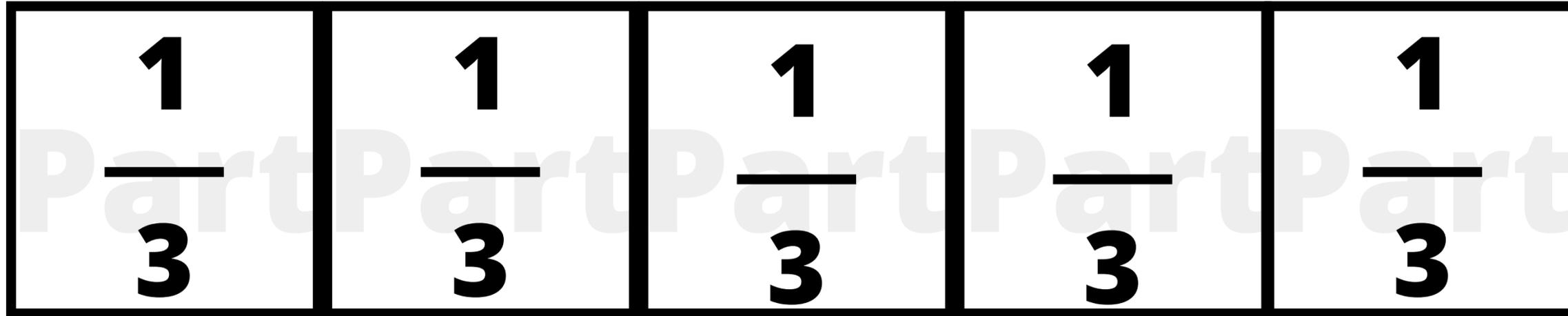
**Non-unit
fraction**

Expand



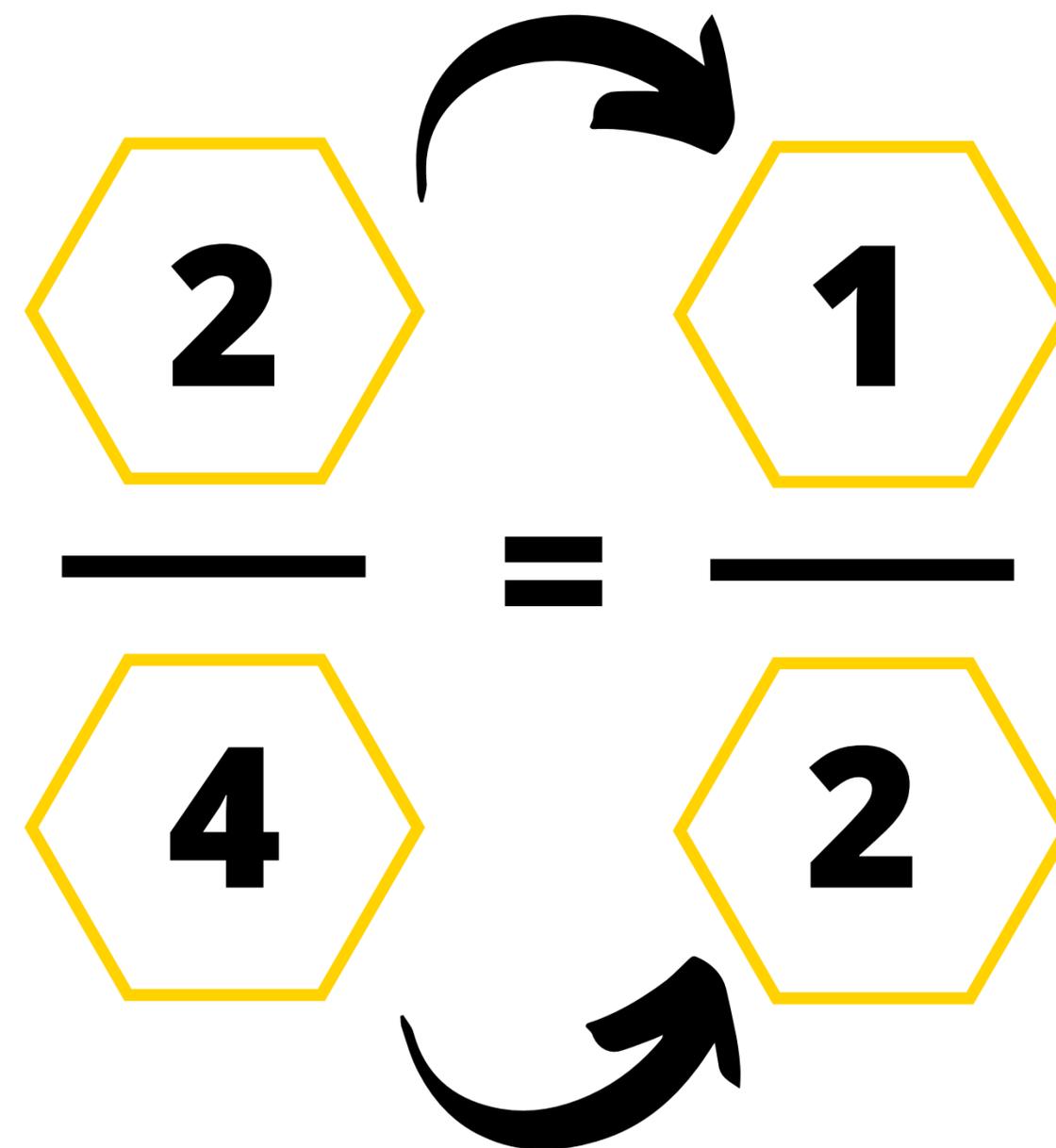
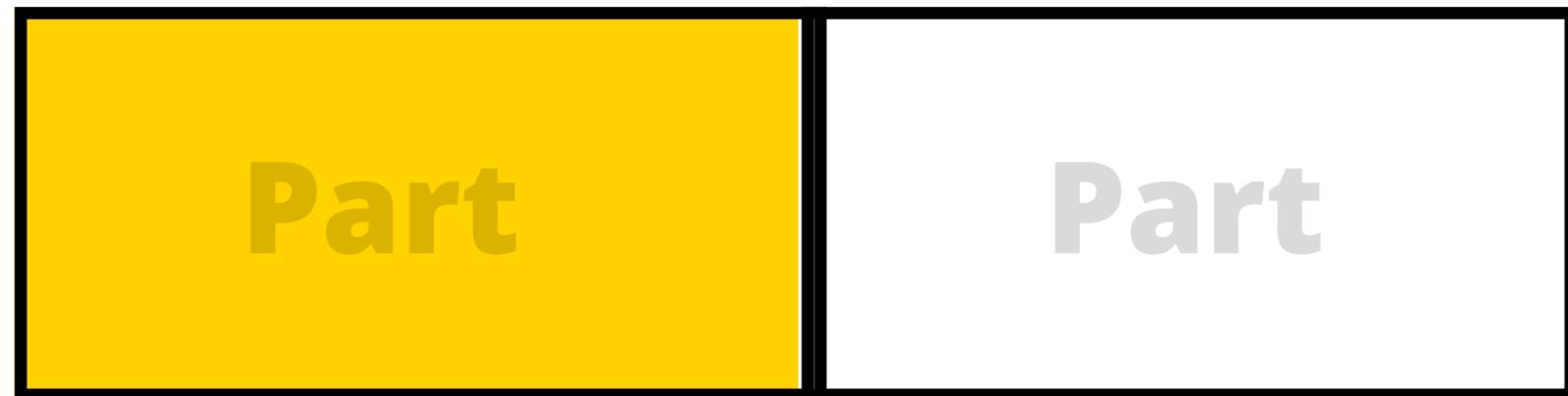
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
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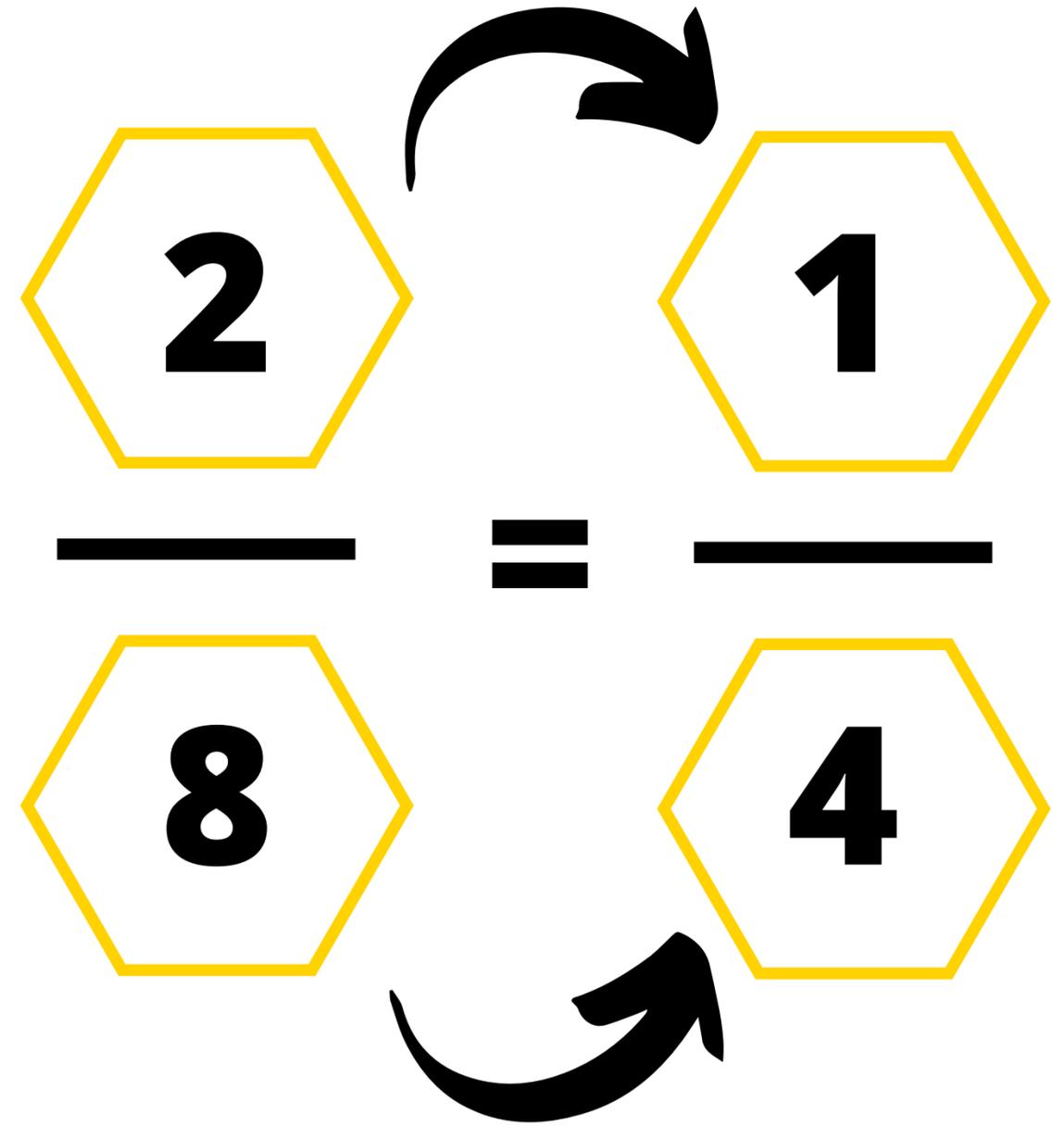
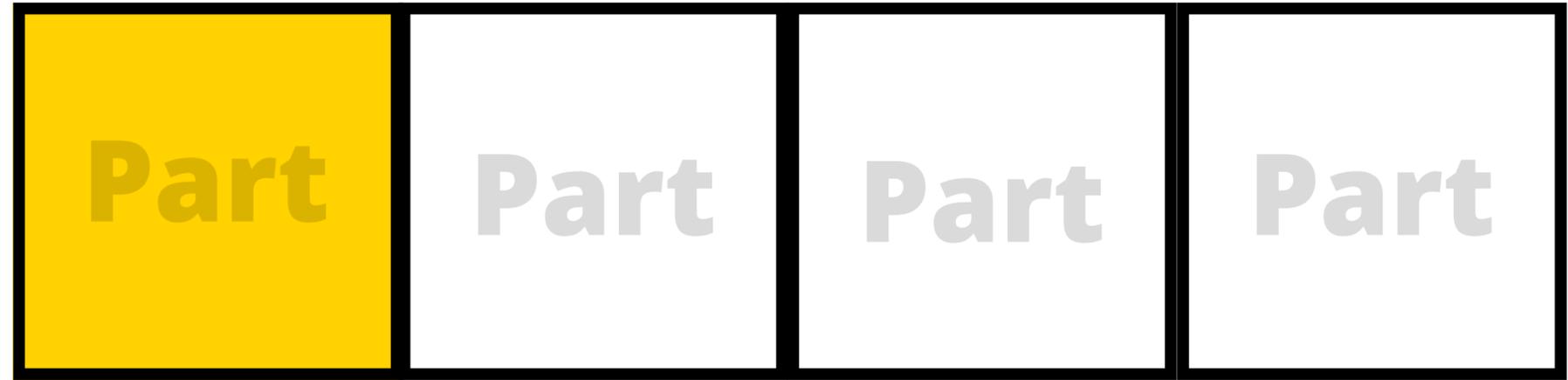
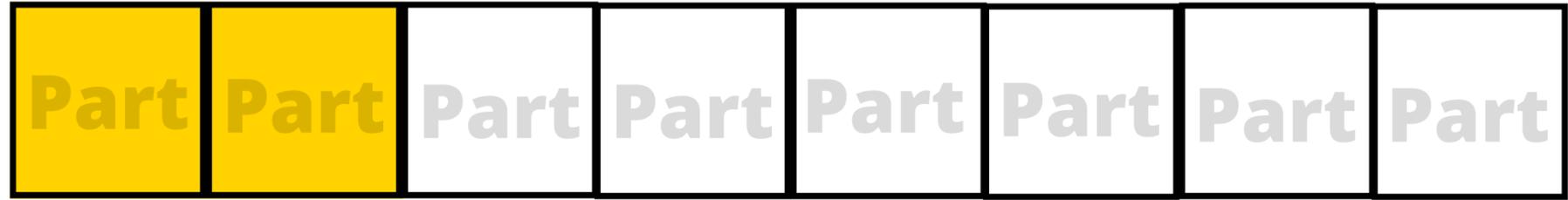
Whole 1	Whole 1	Part $\frac{1}{2}$
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$\frac{1}{4}$						
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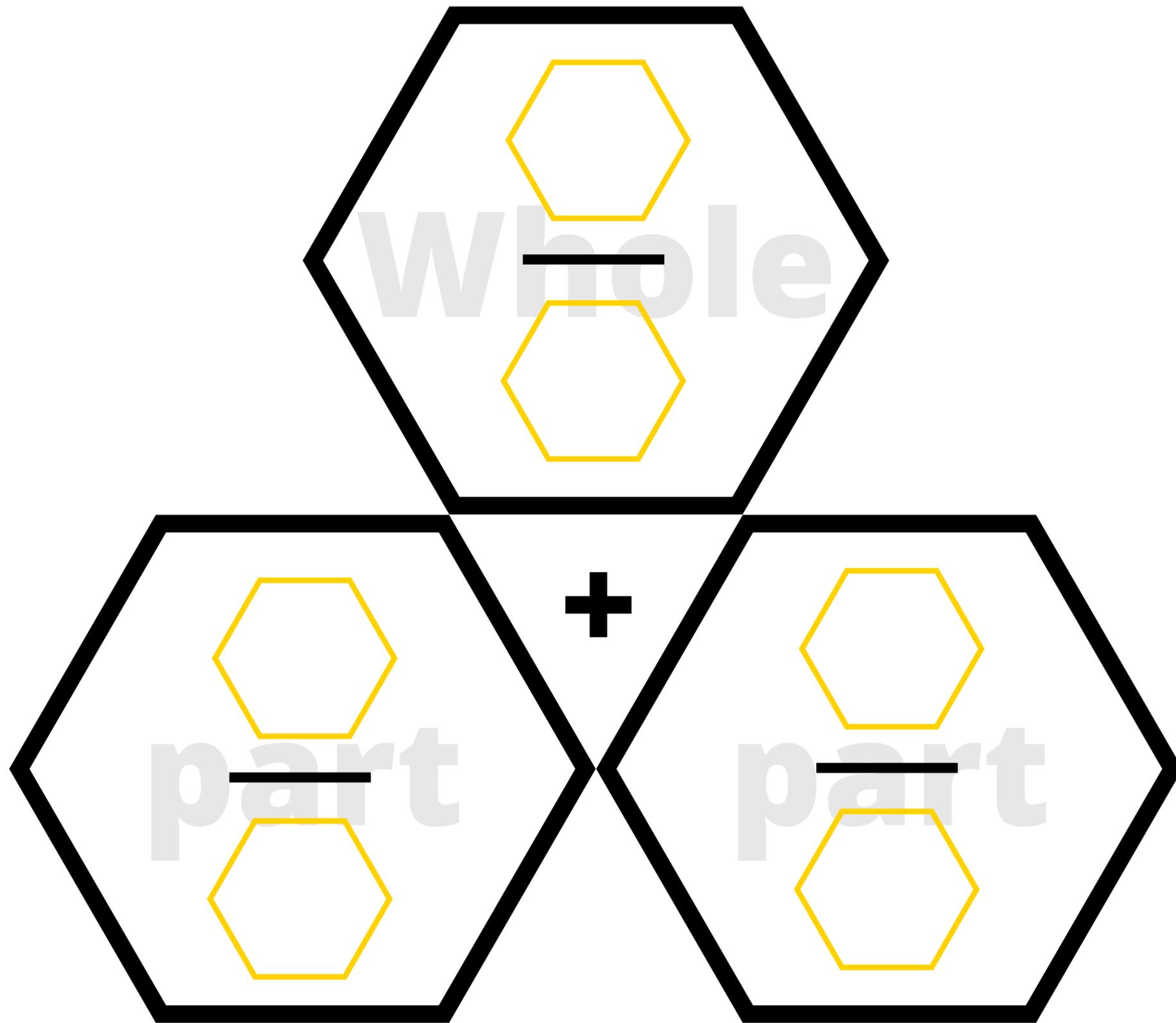
1				$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
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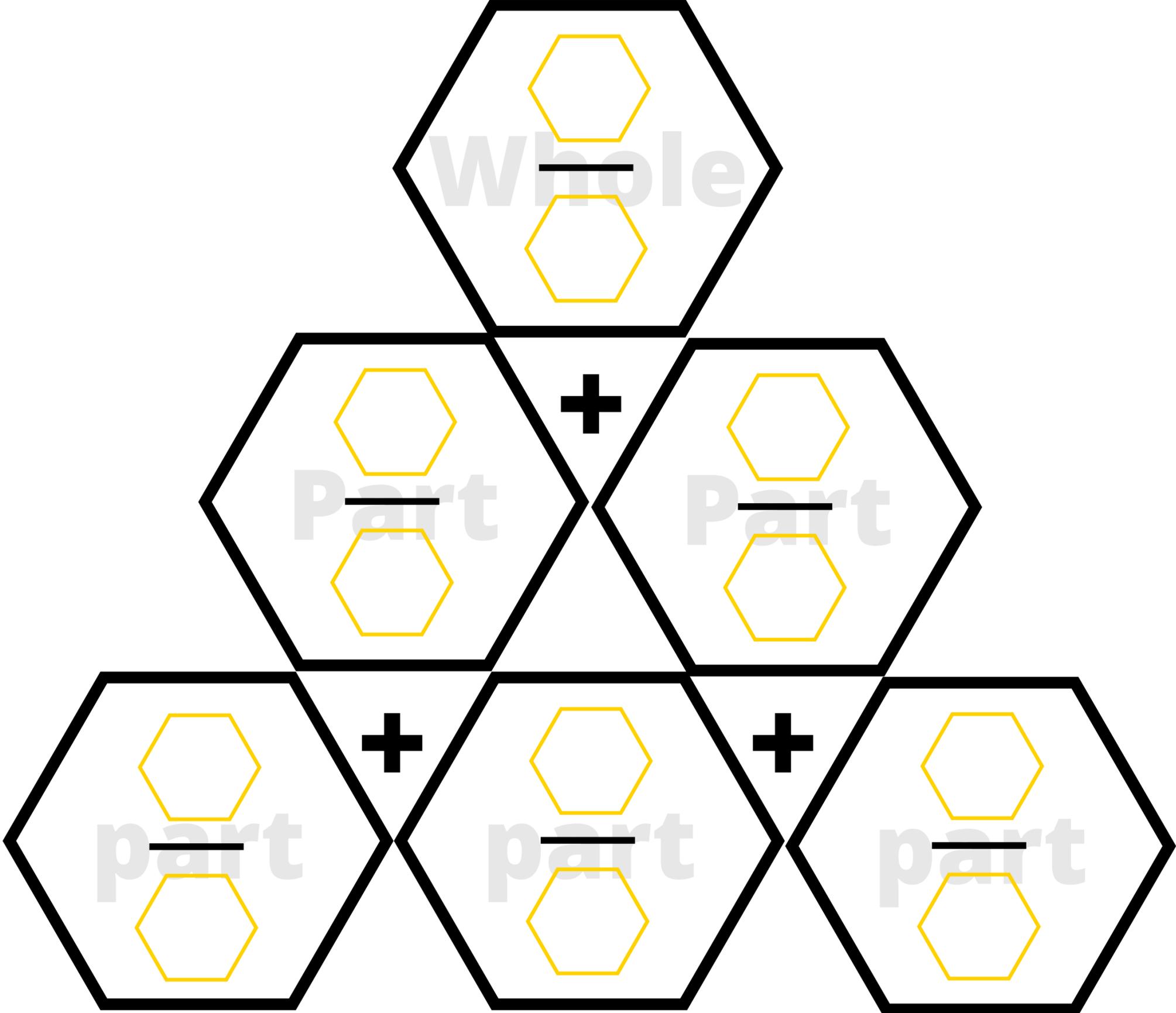








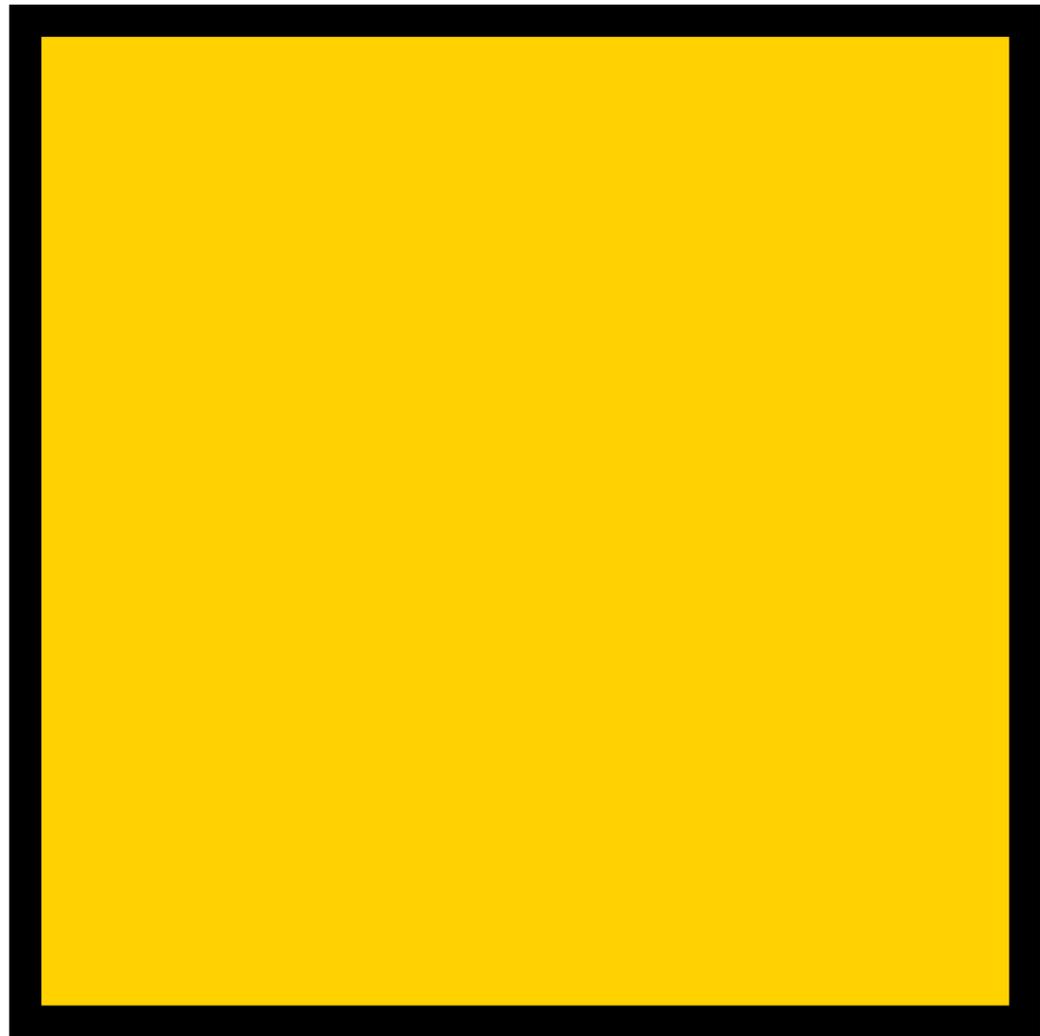




1

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4



1

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2

1

—

2

1

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4

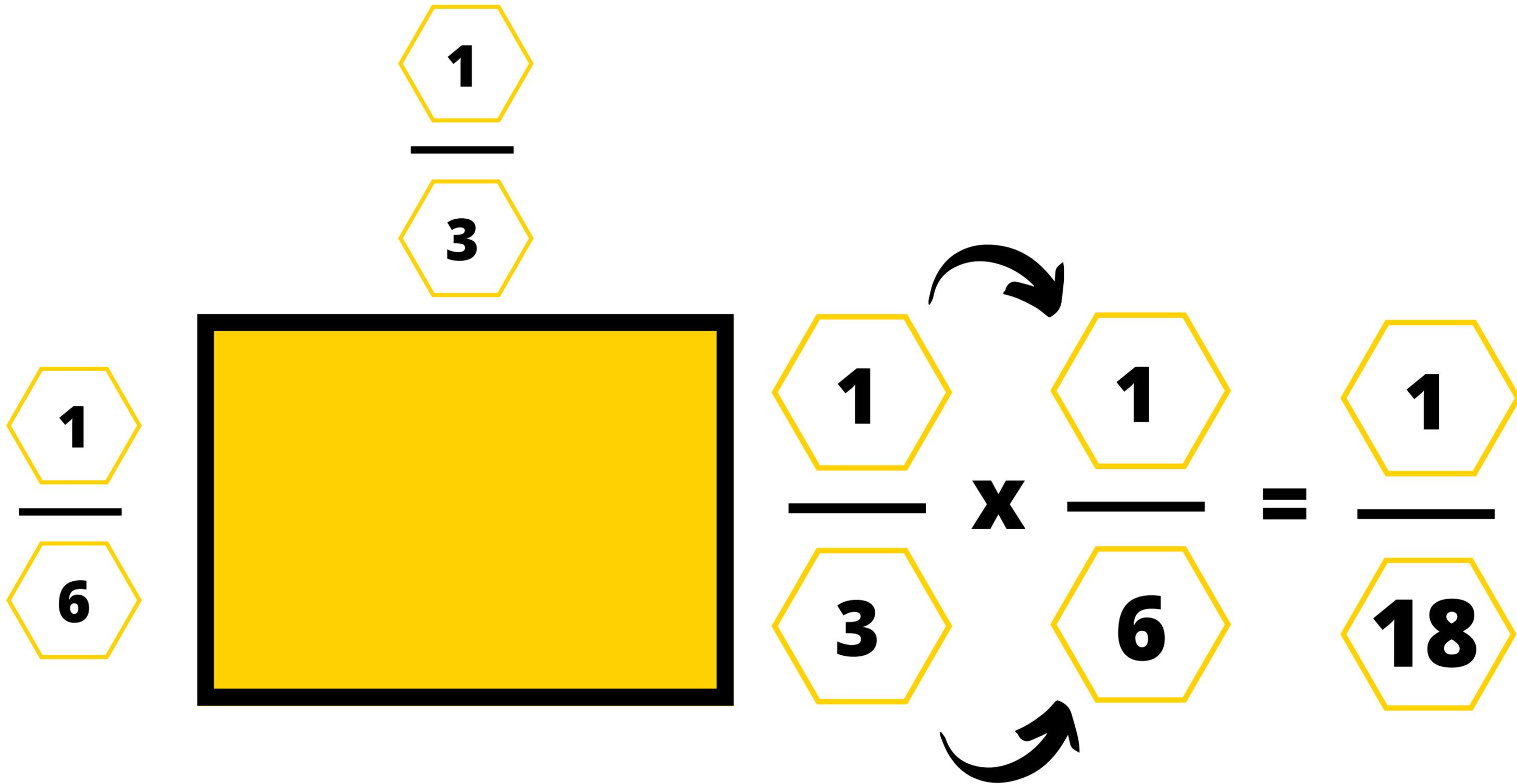
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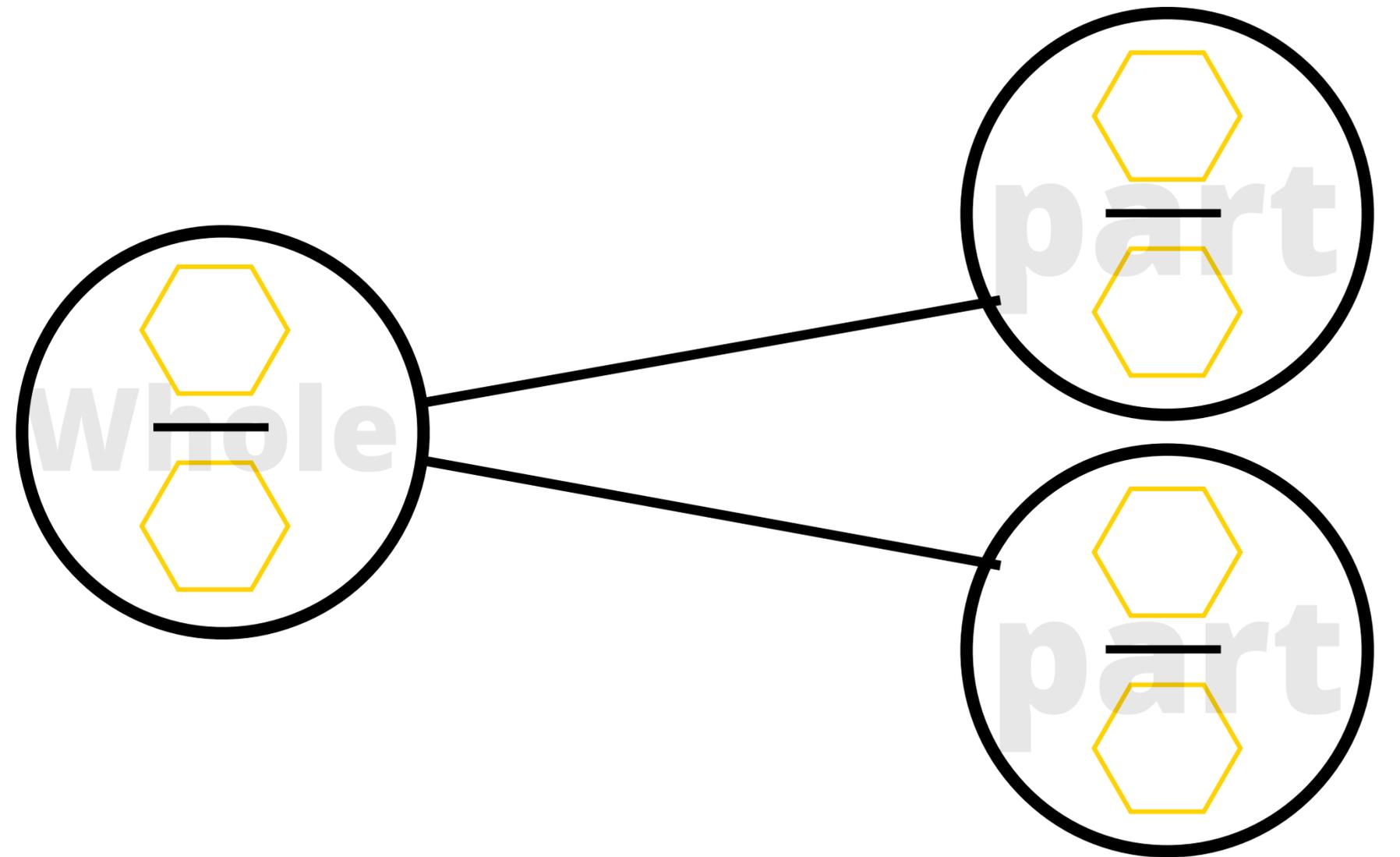
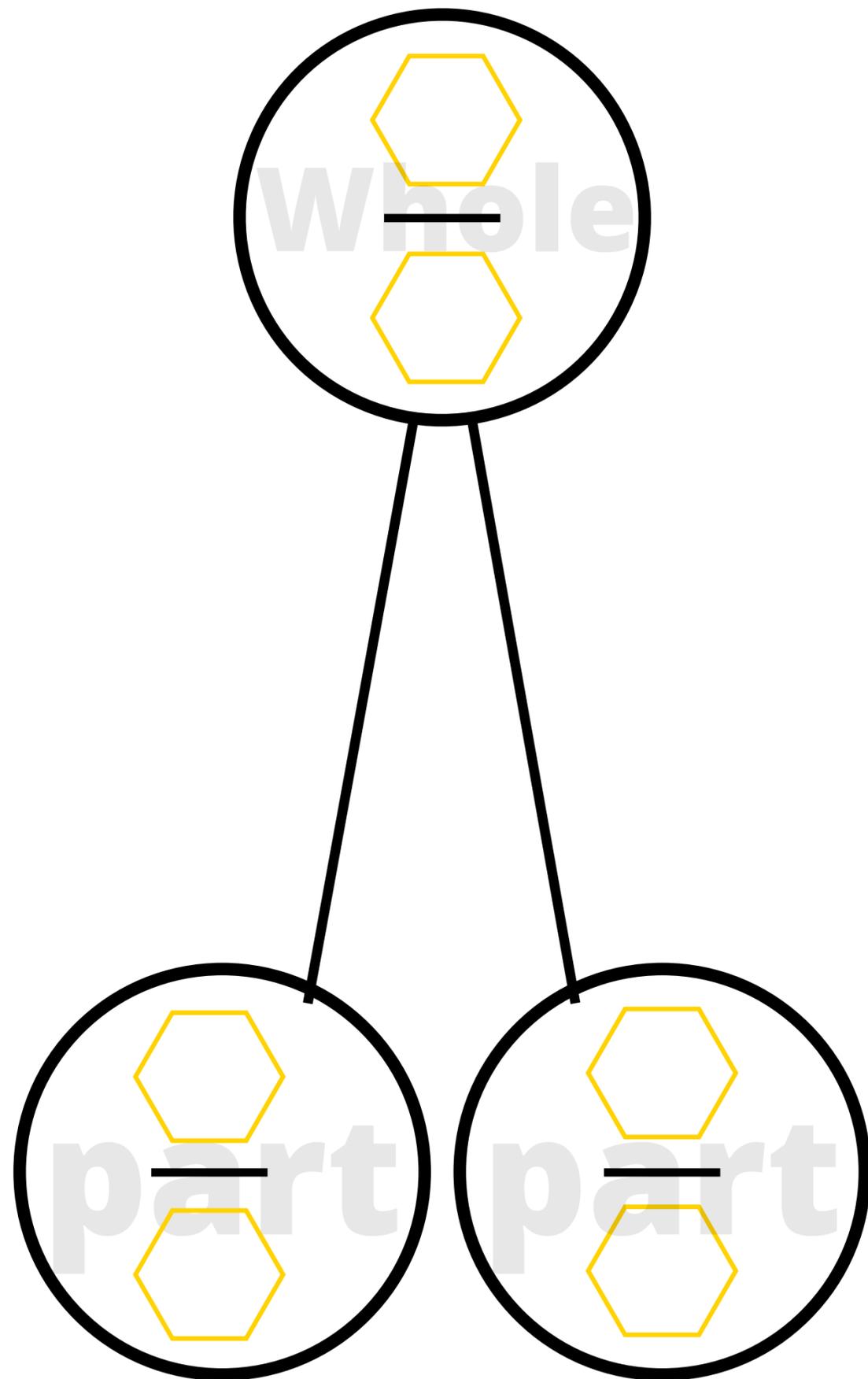
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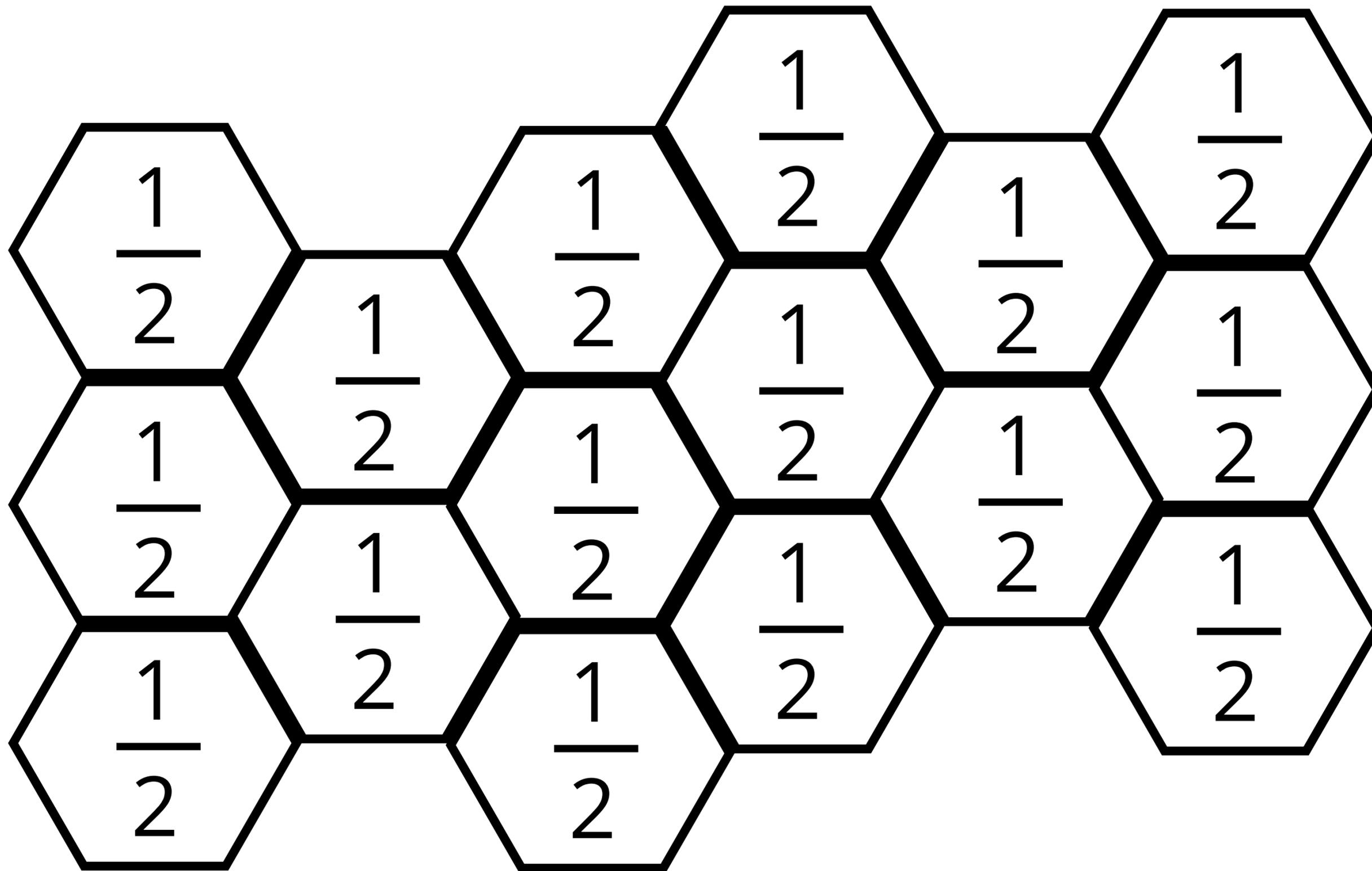
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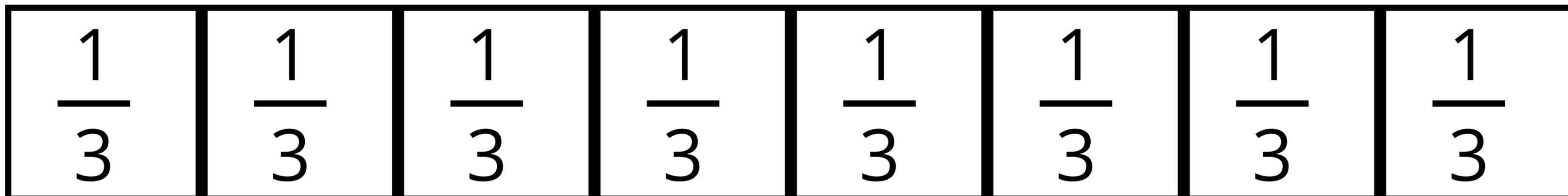
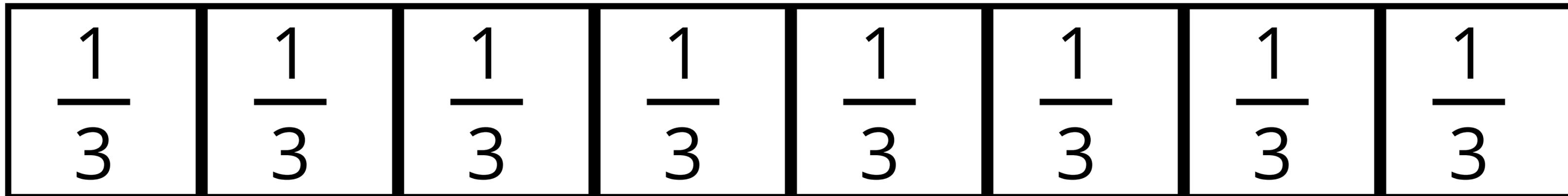
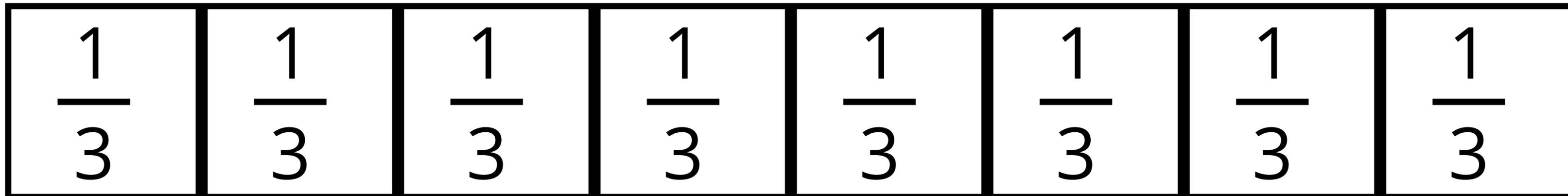


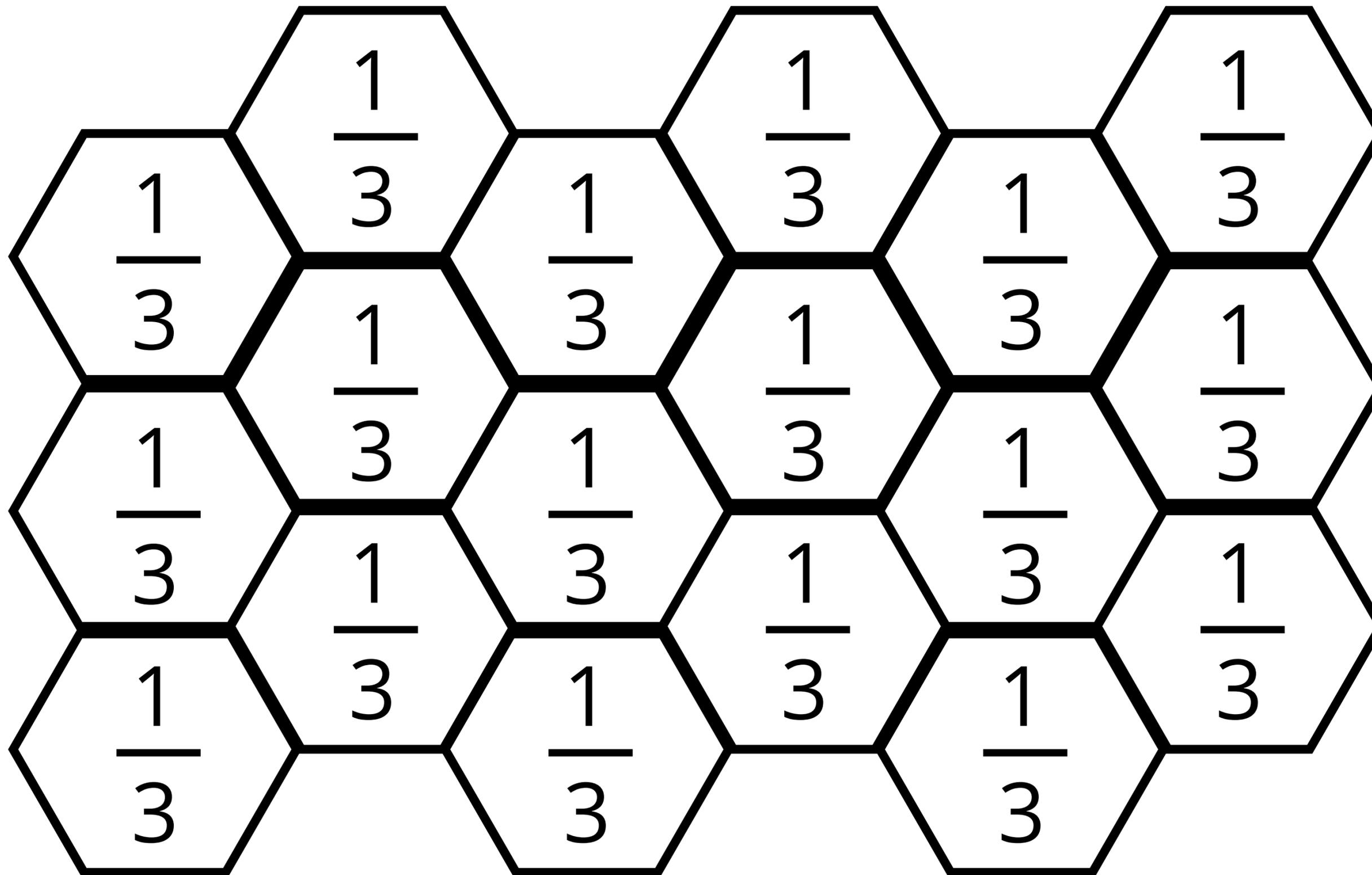


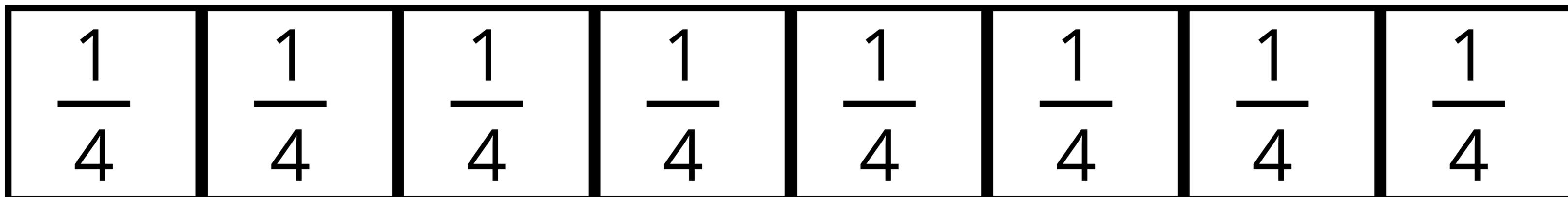
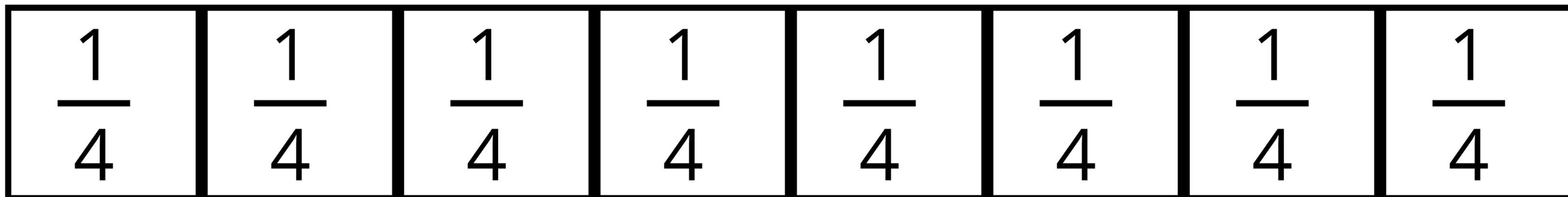
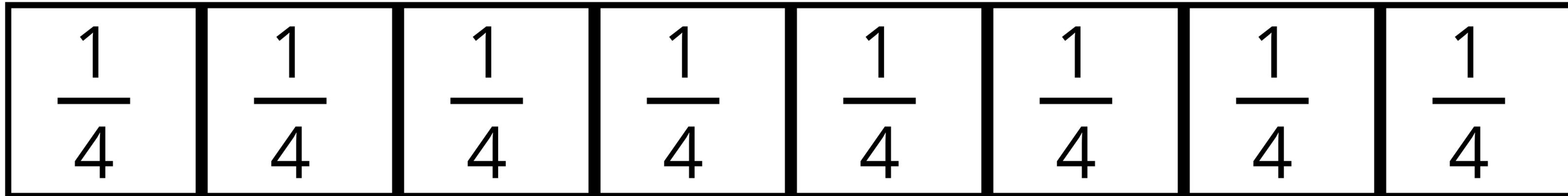
Counting fractions

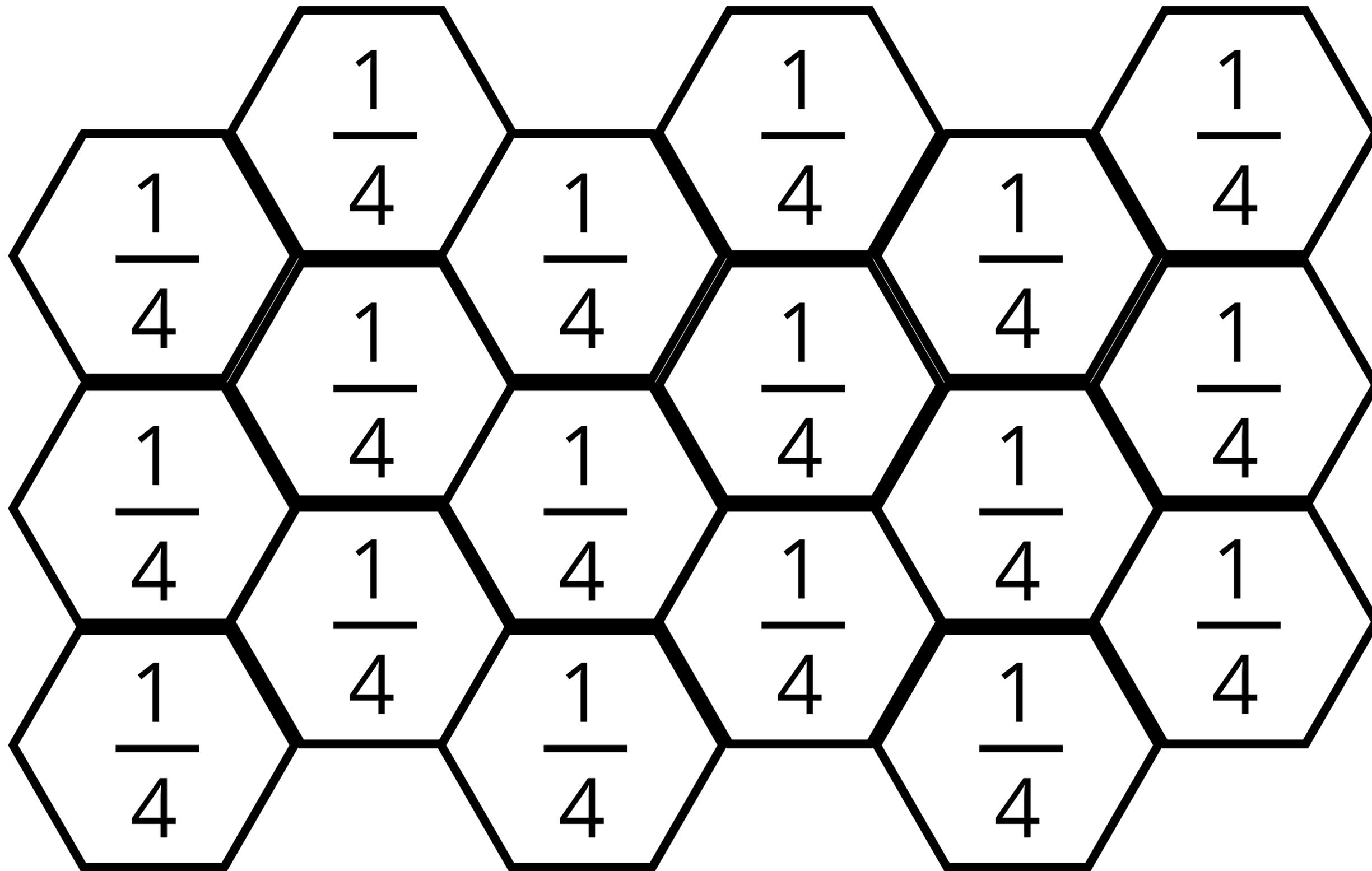
$$\frac{1}{2}$$

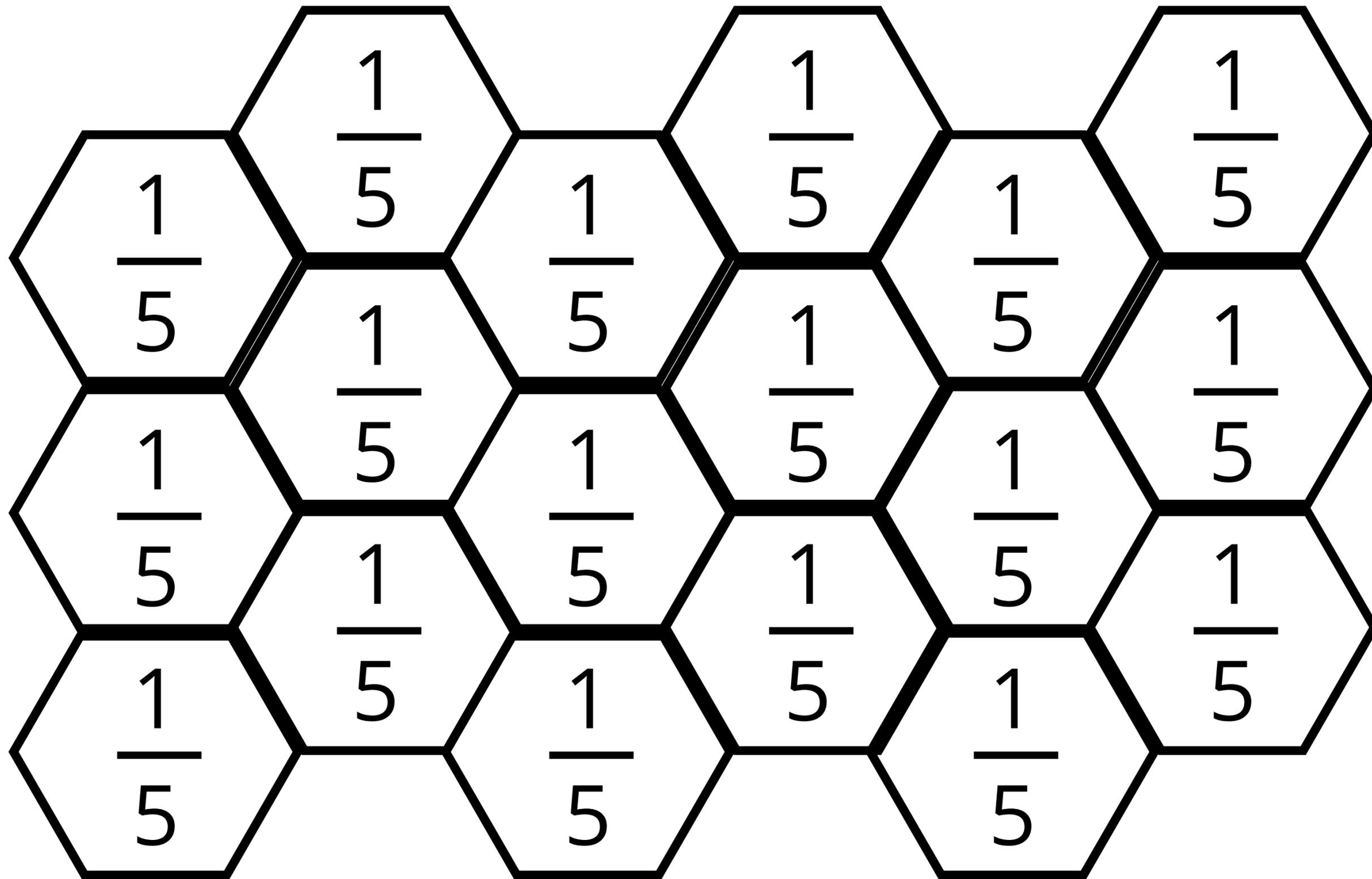


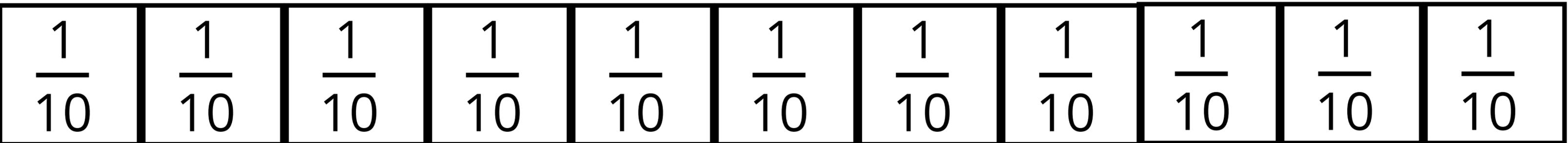
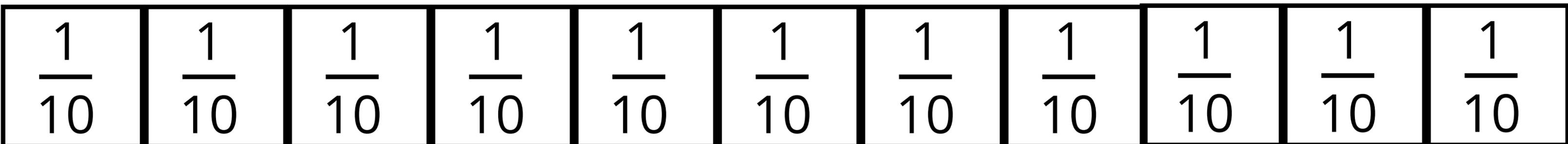
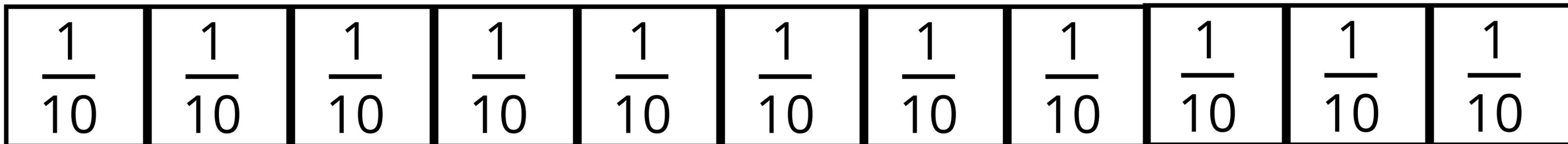
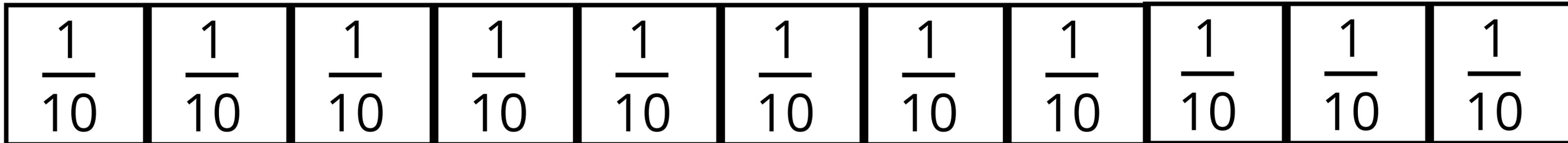


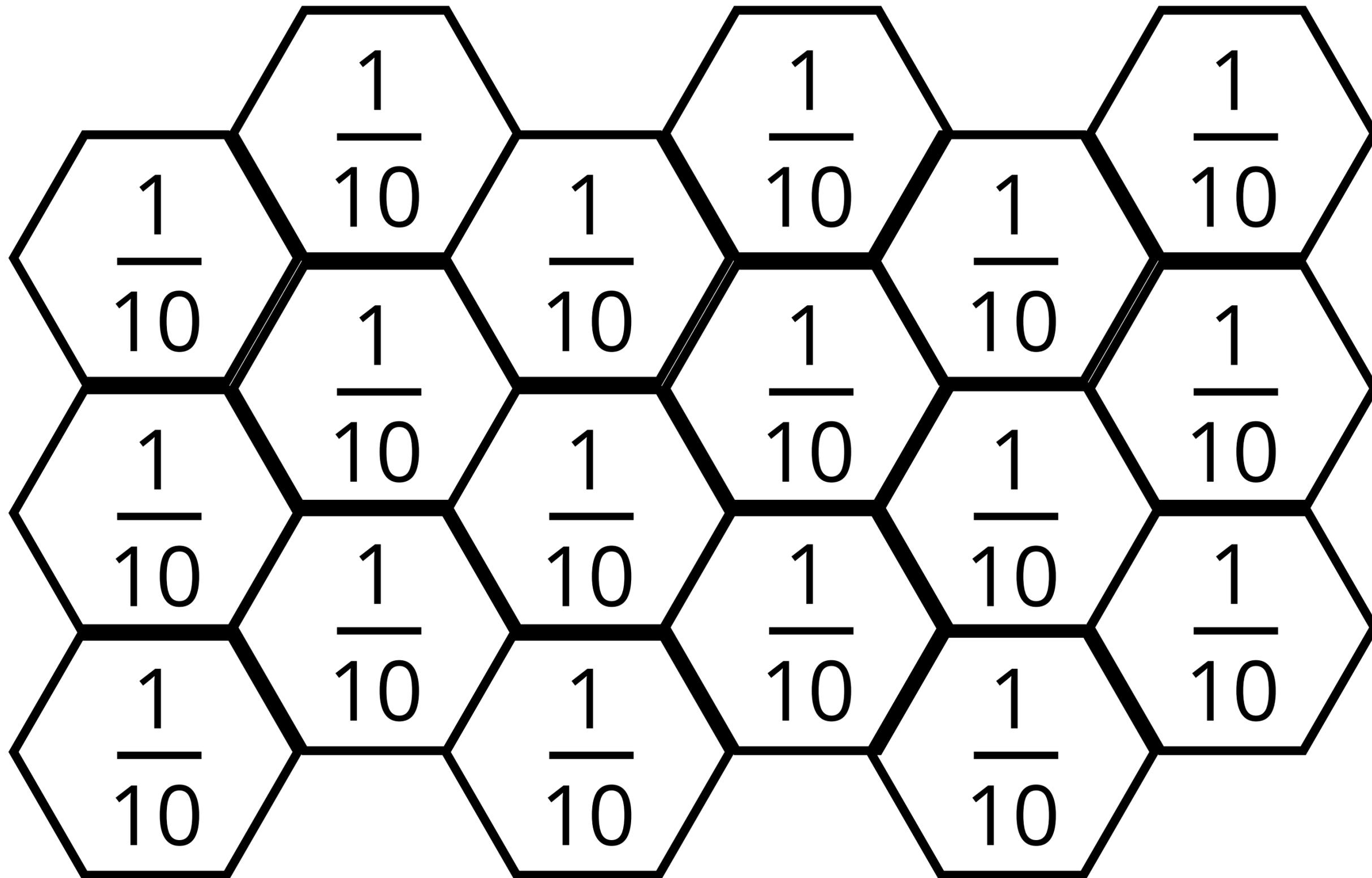


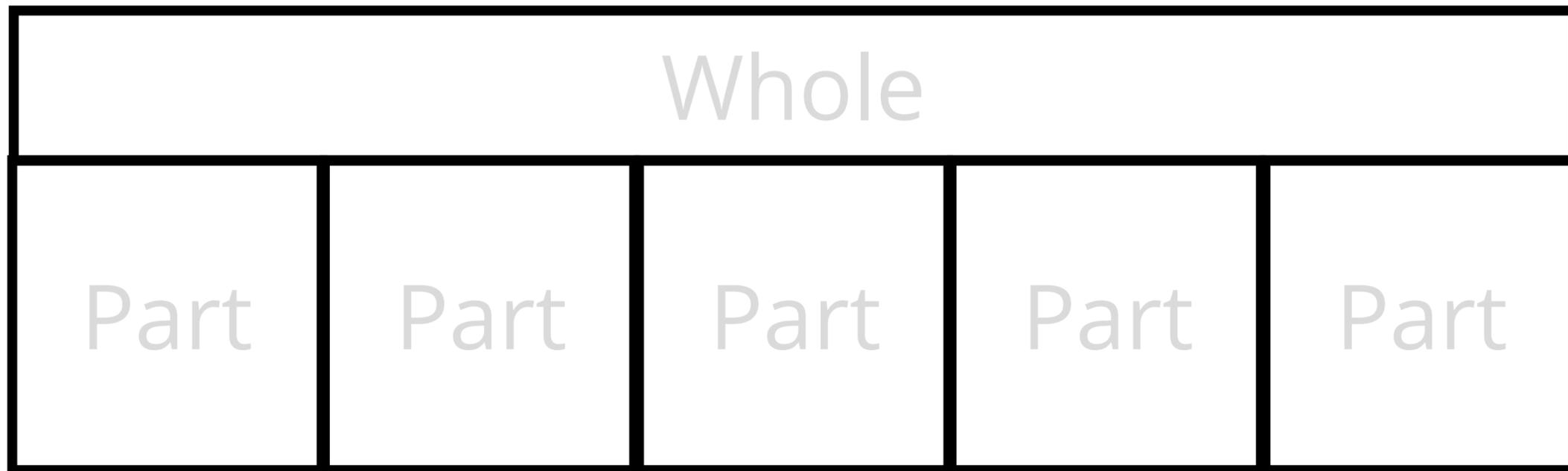
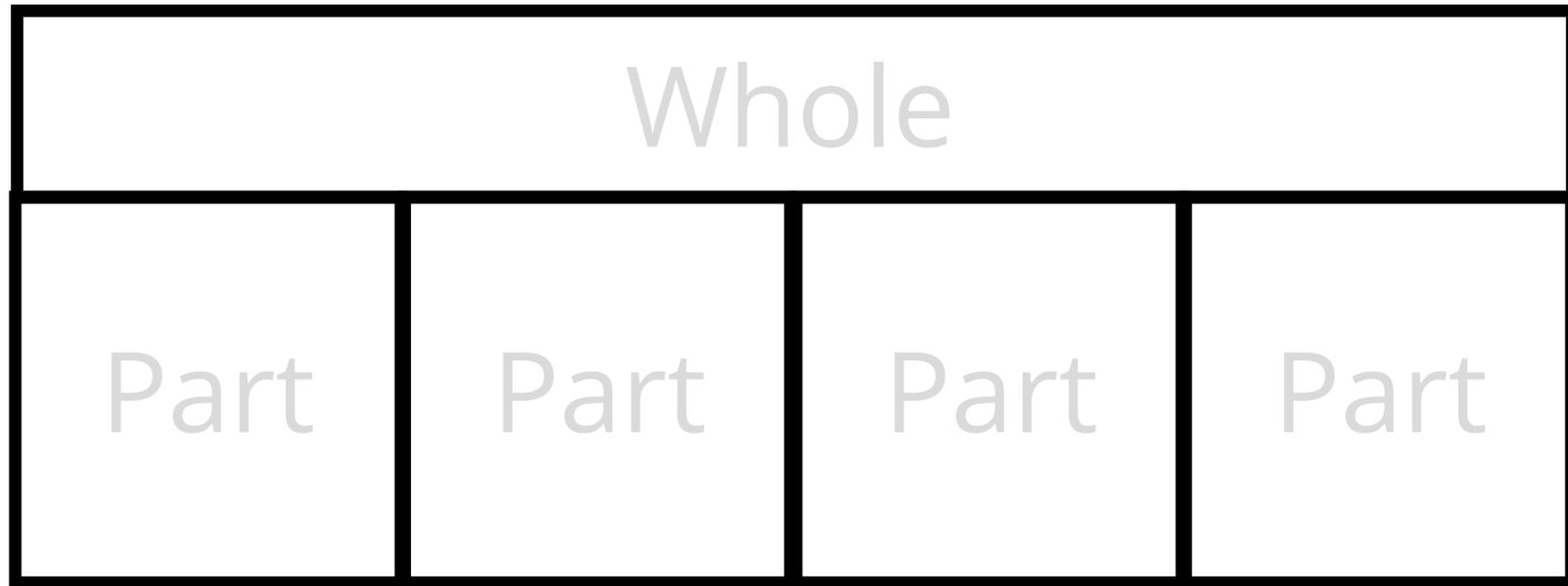


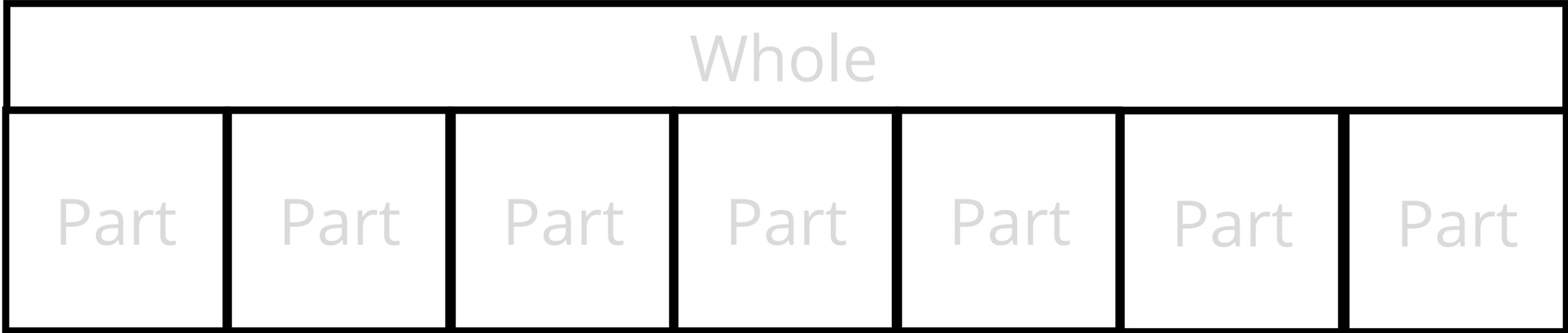
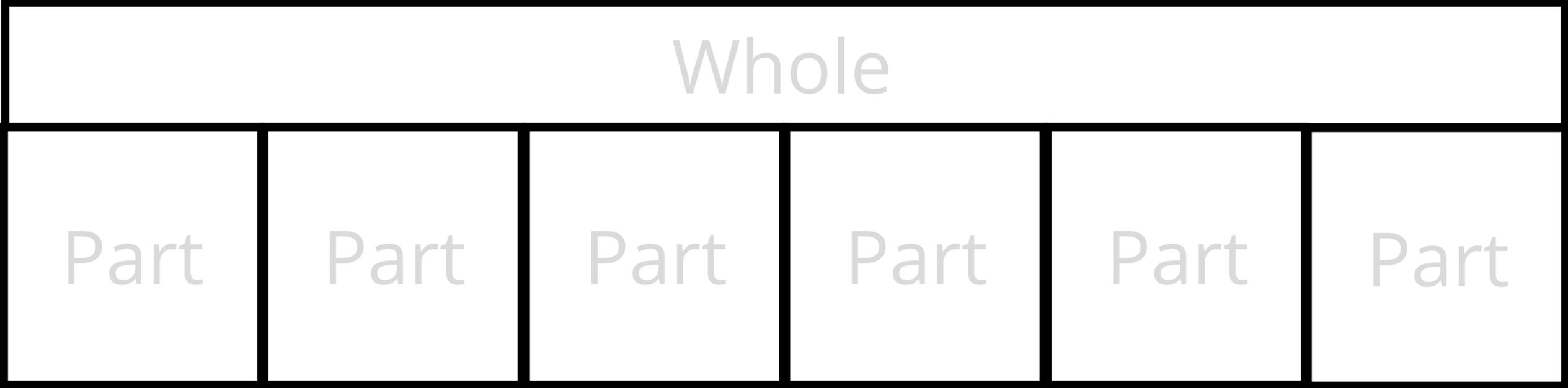


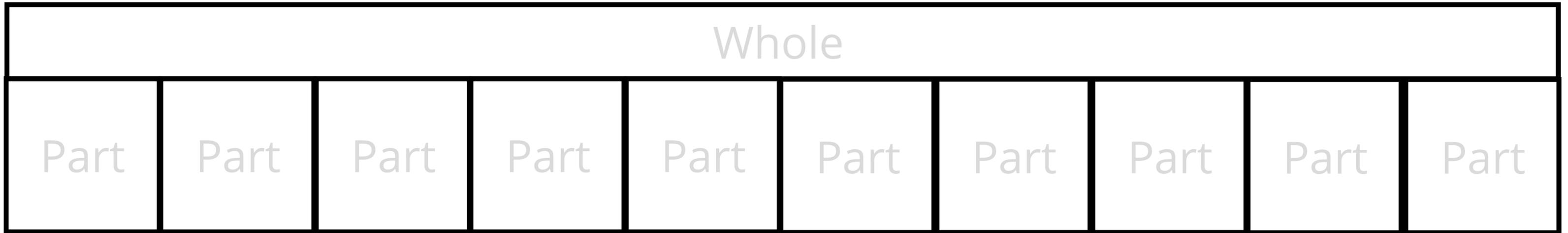
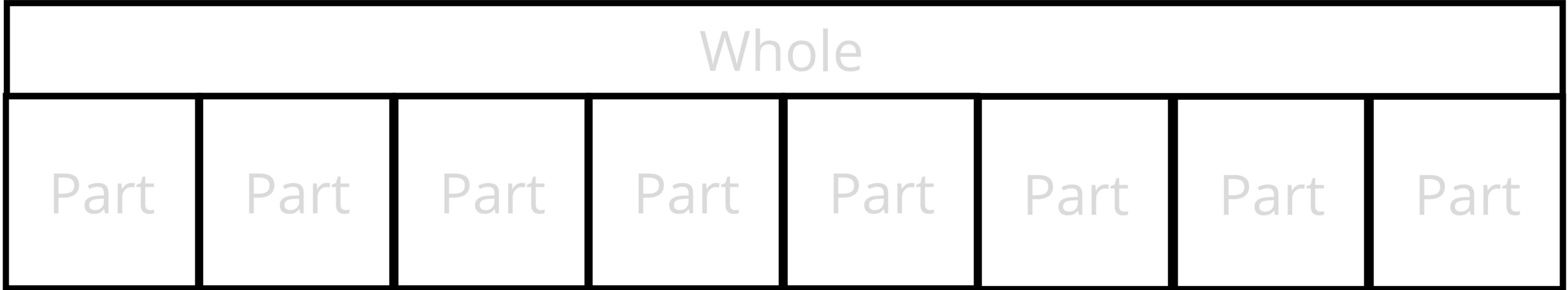


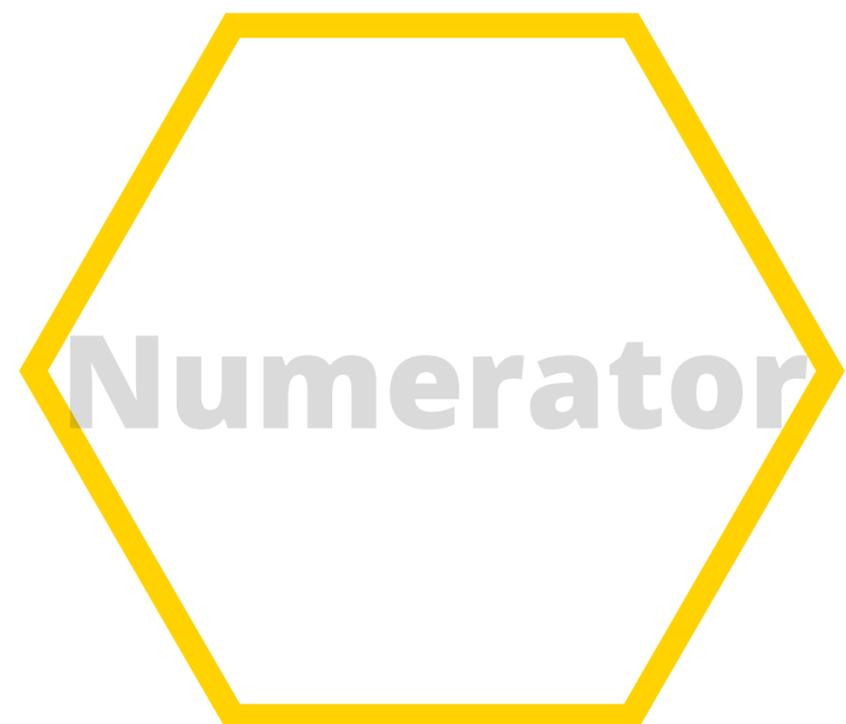
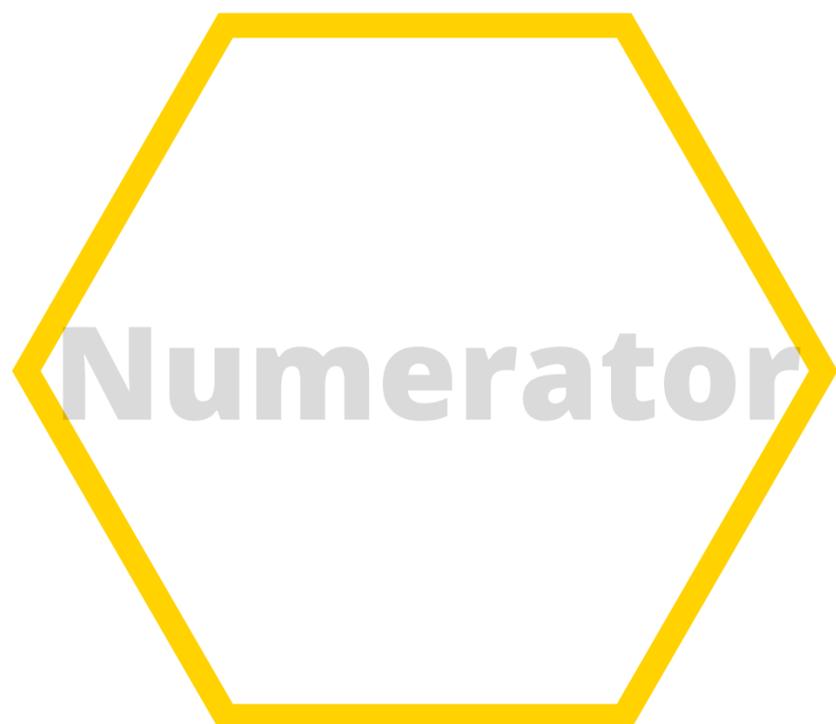
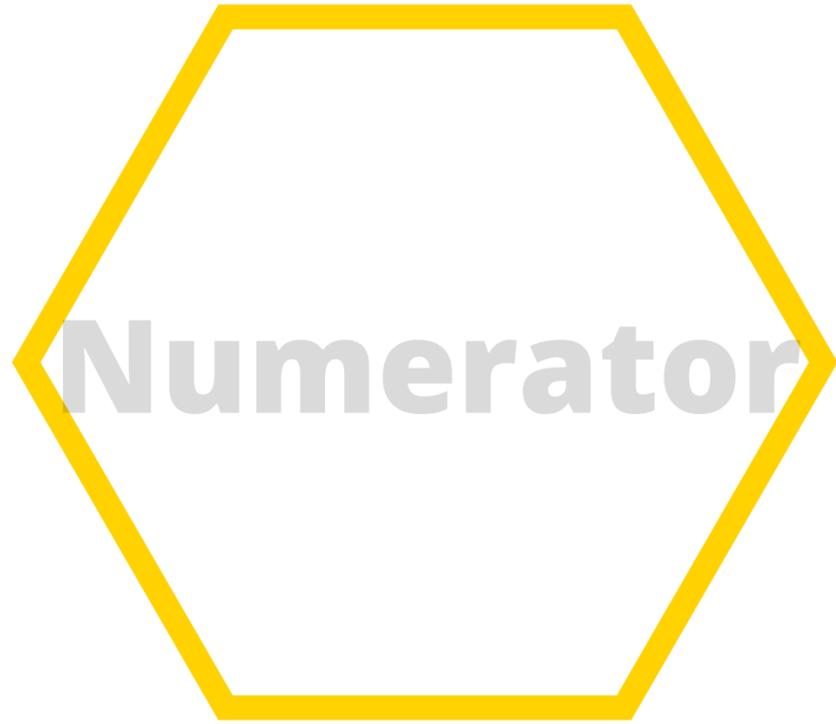


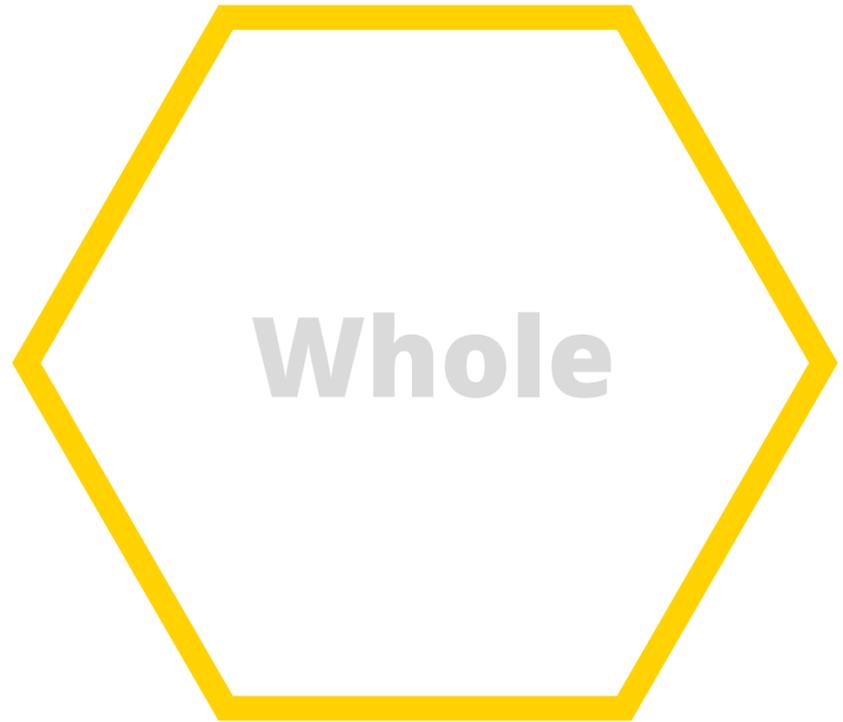
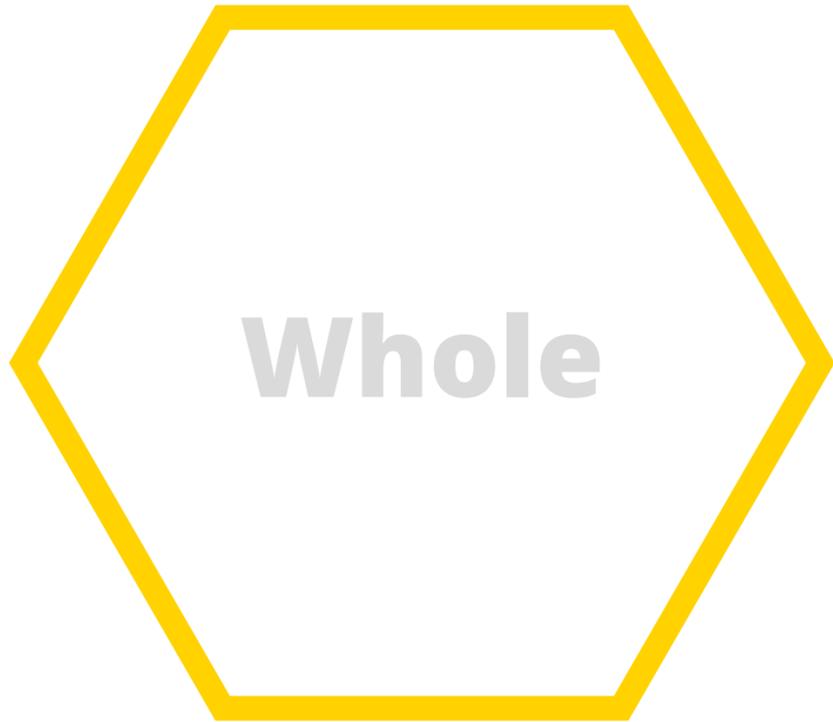
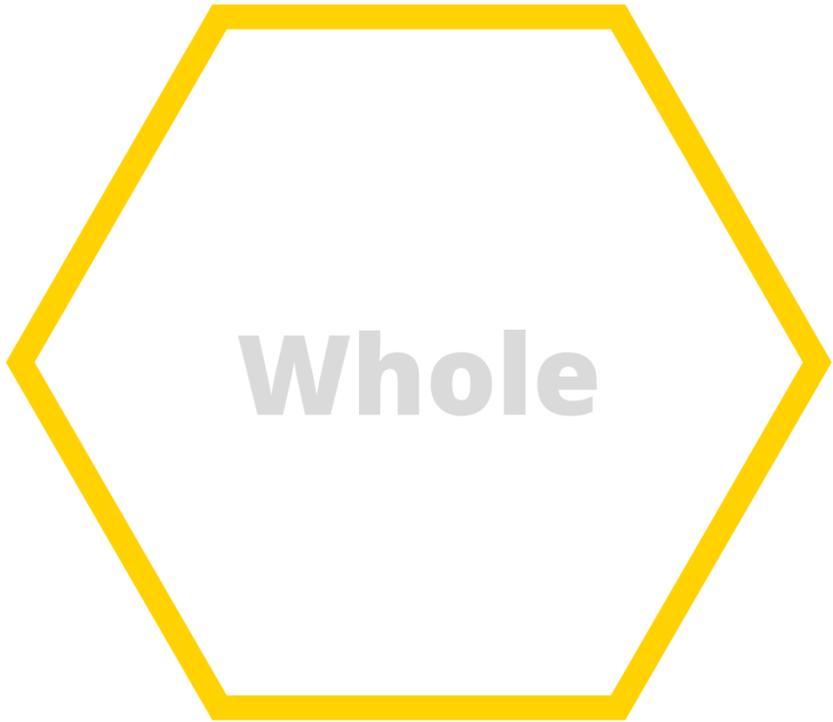
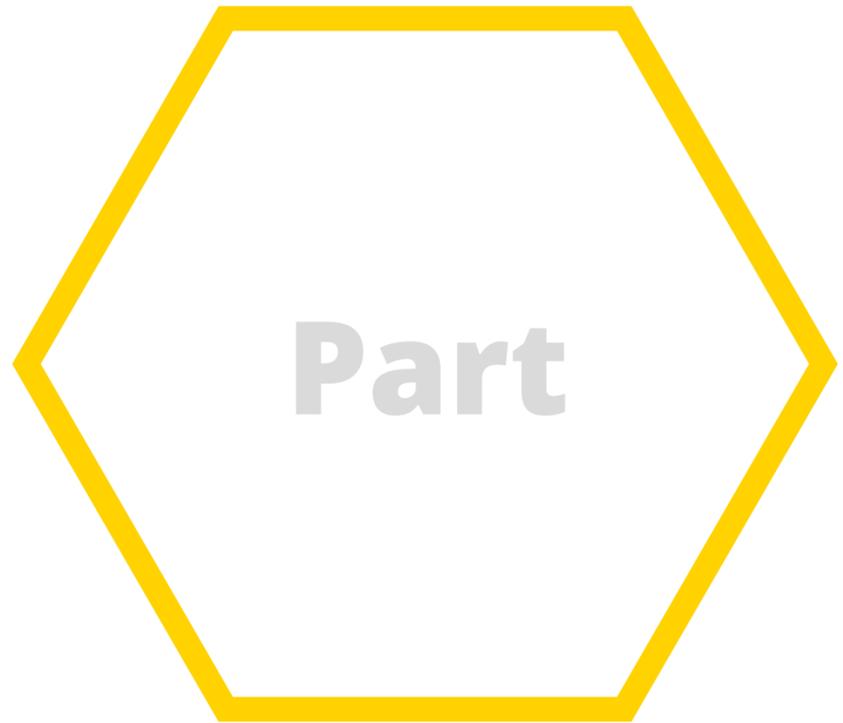
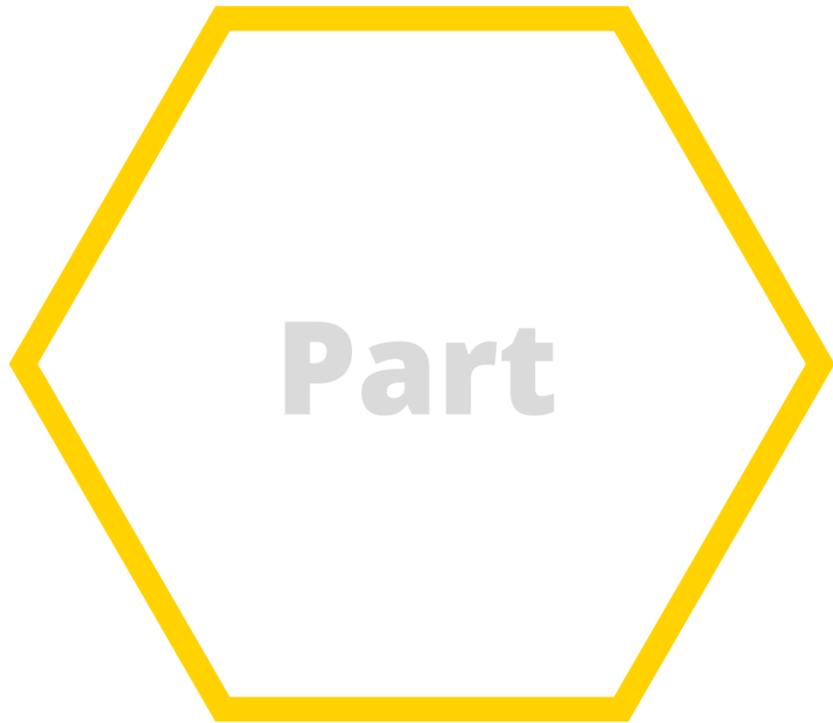
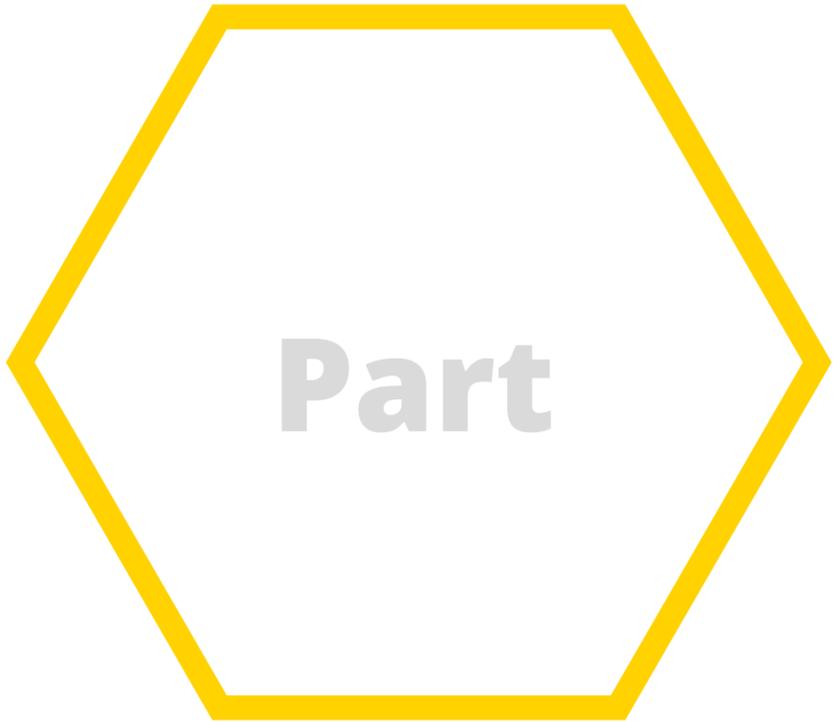


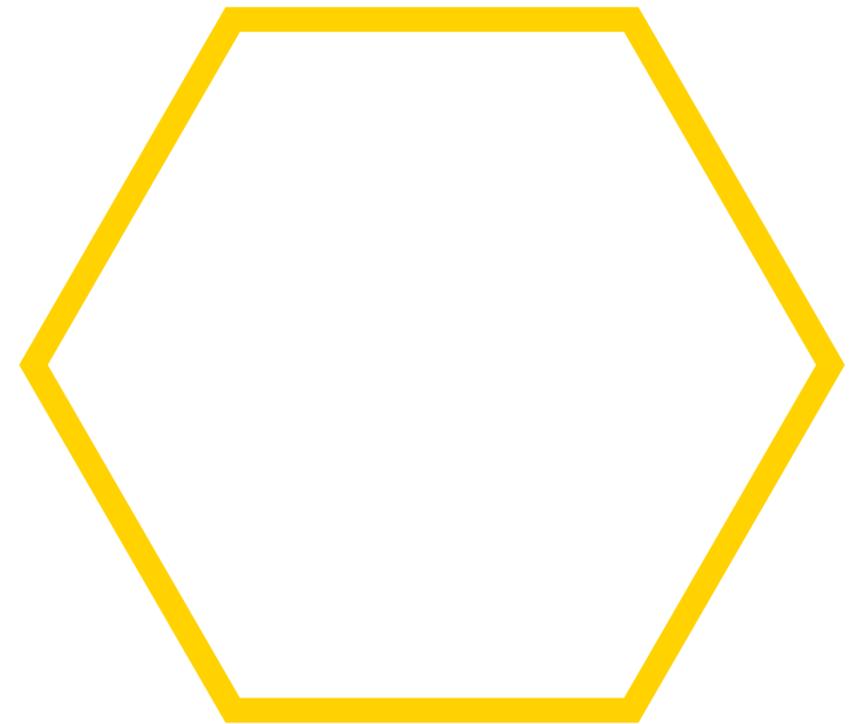
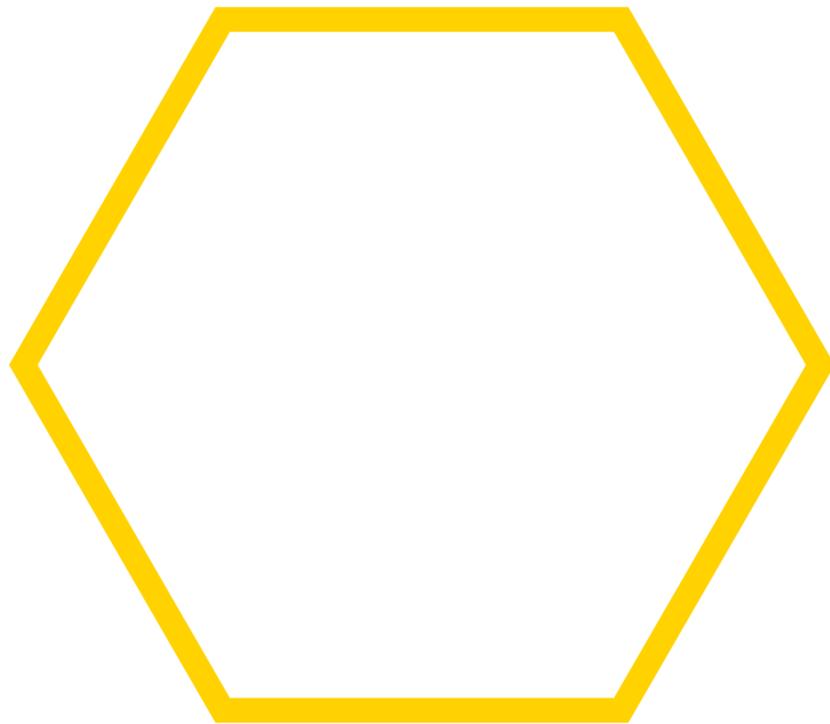
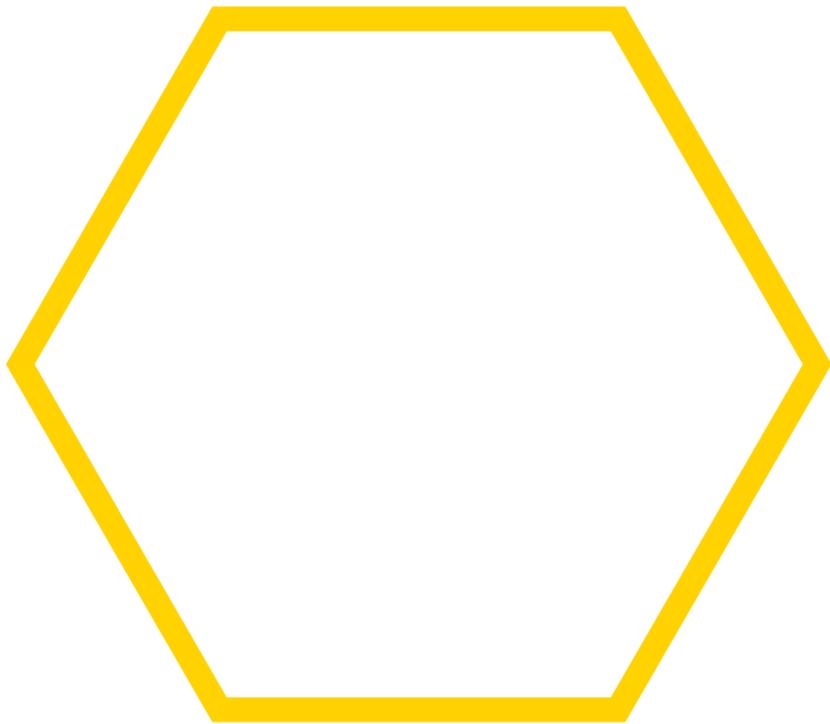
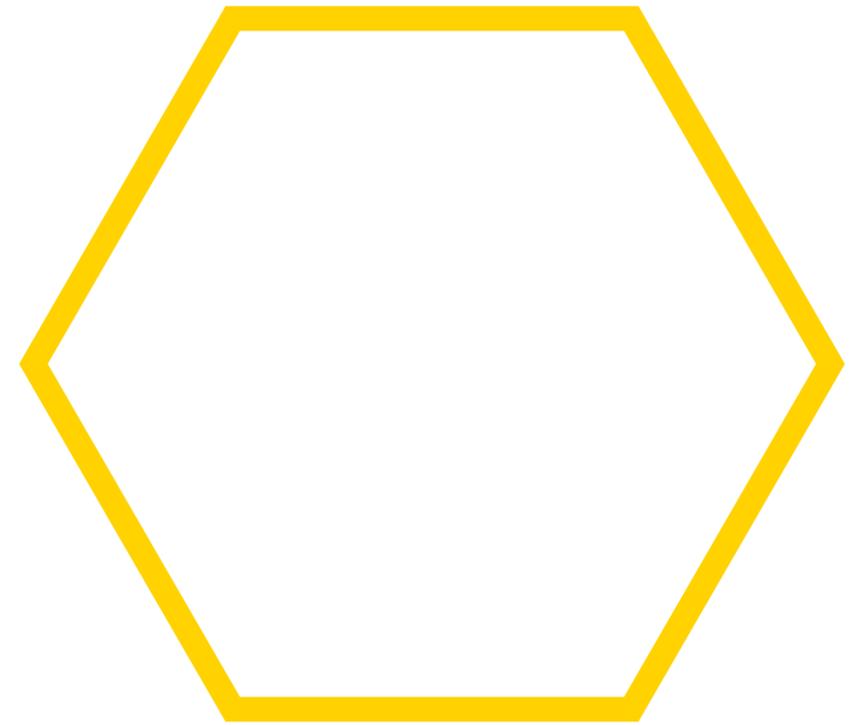
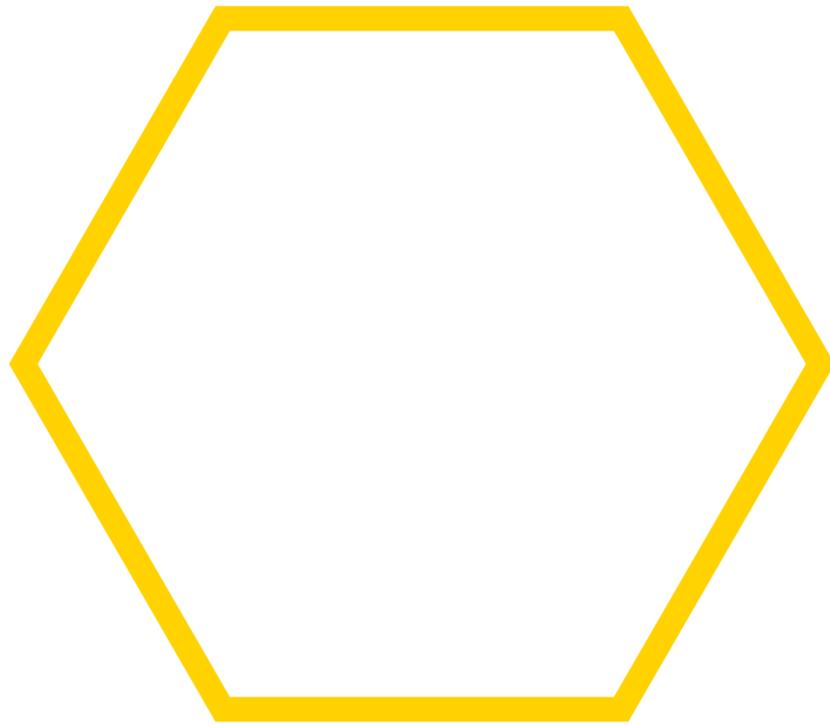
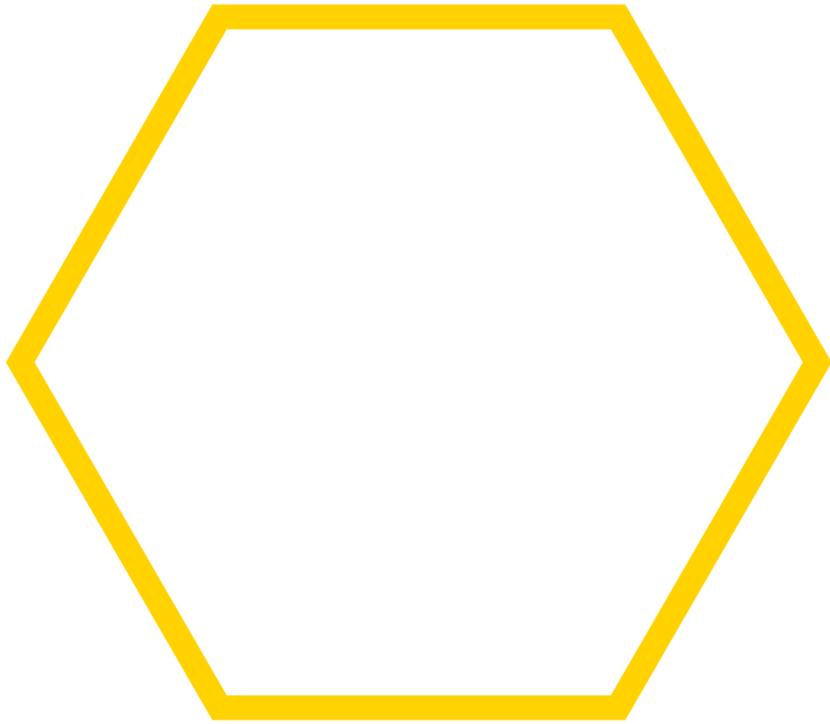


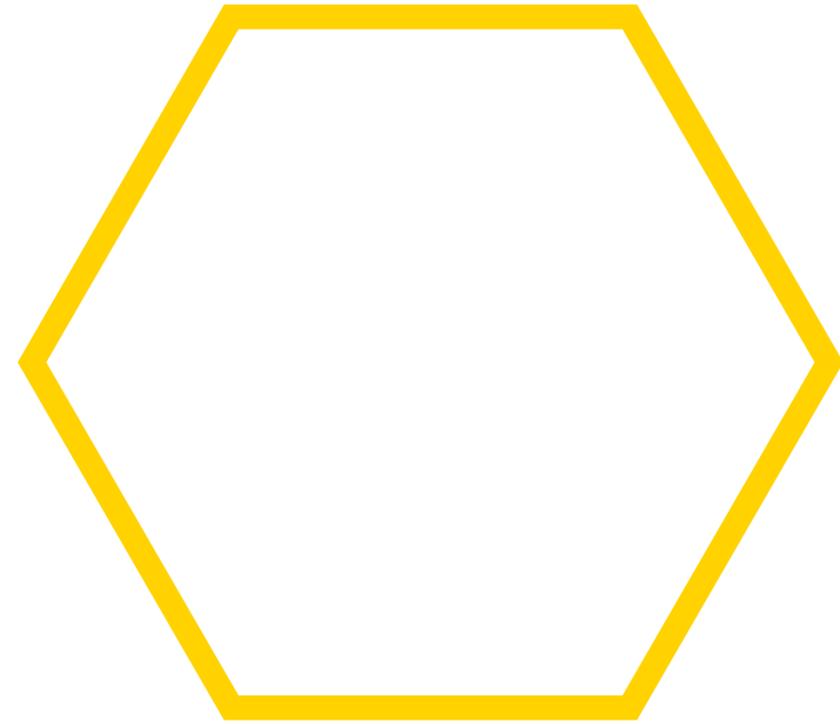
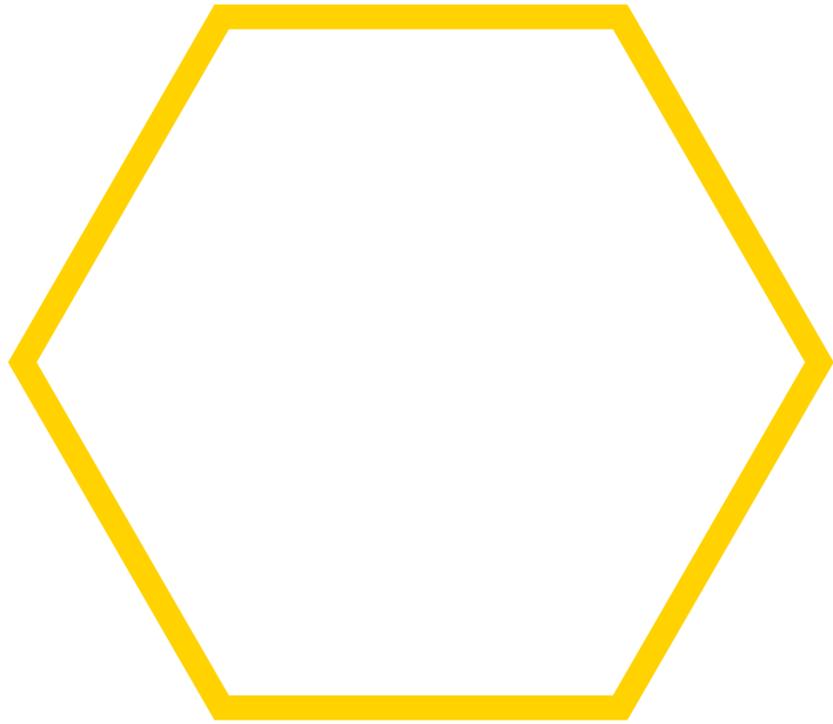
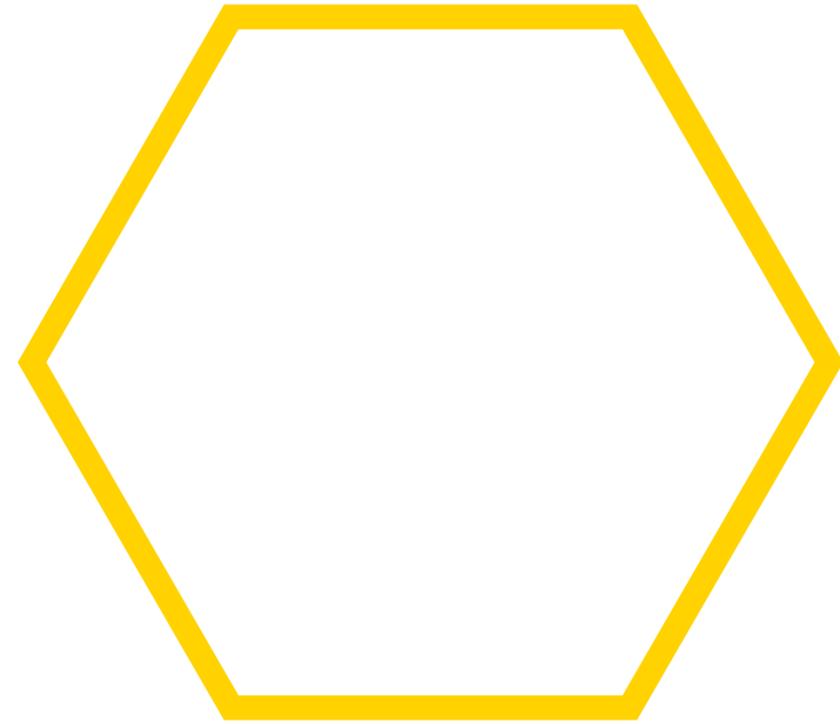
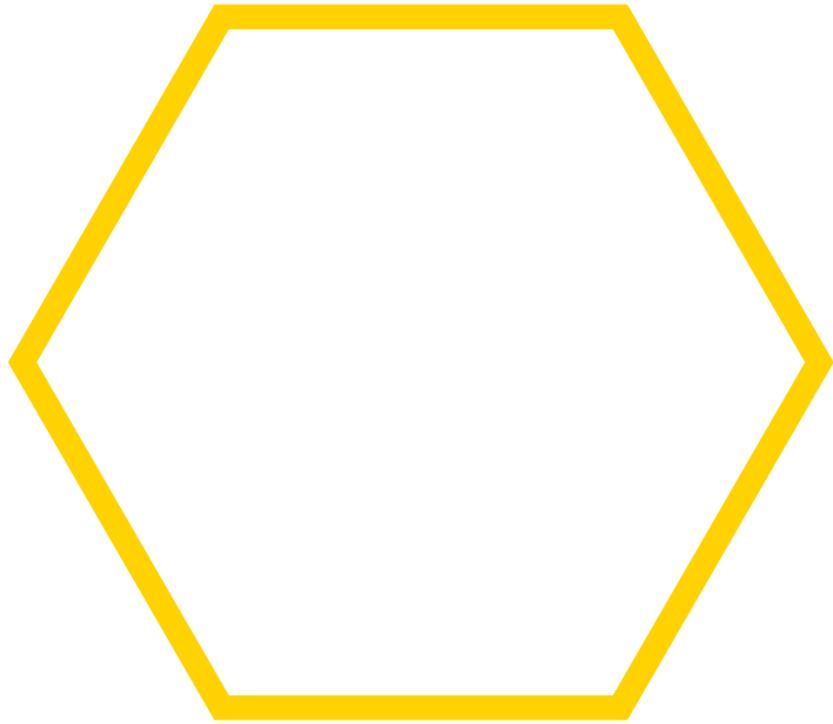


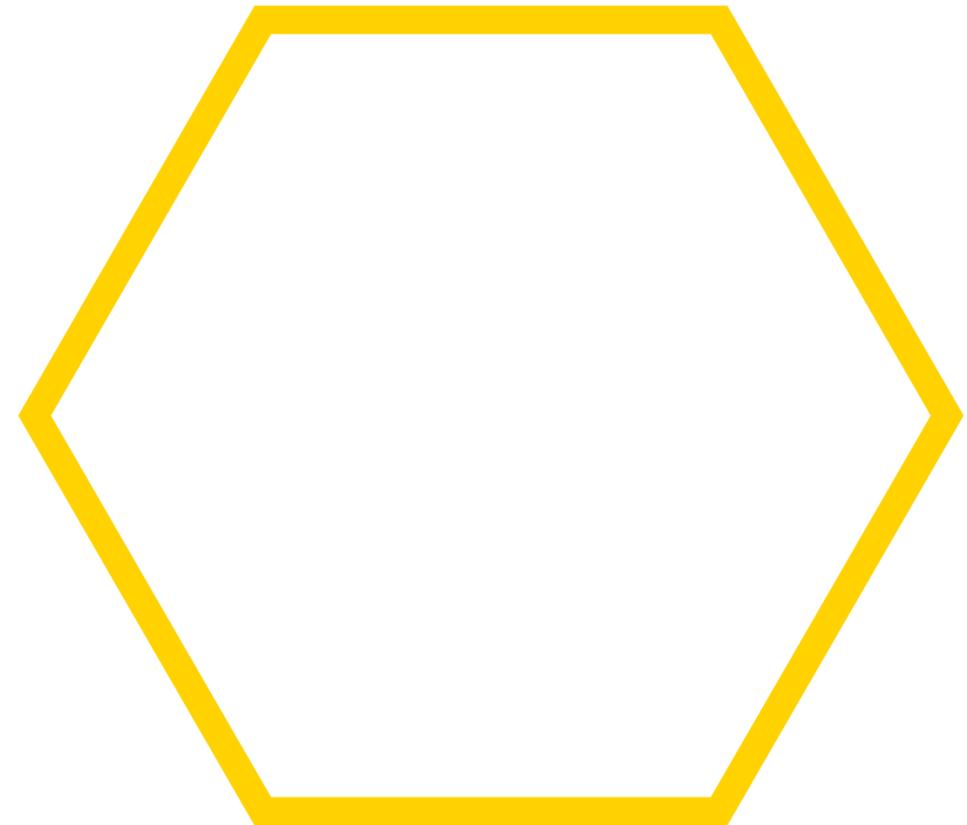
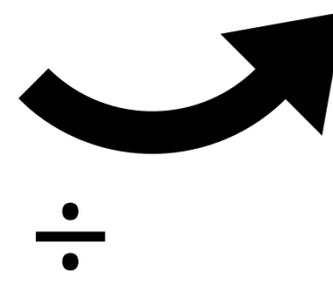
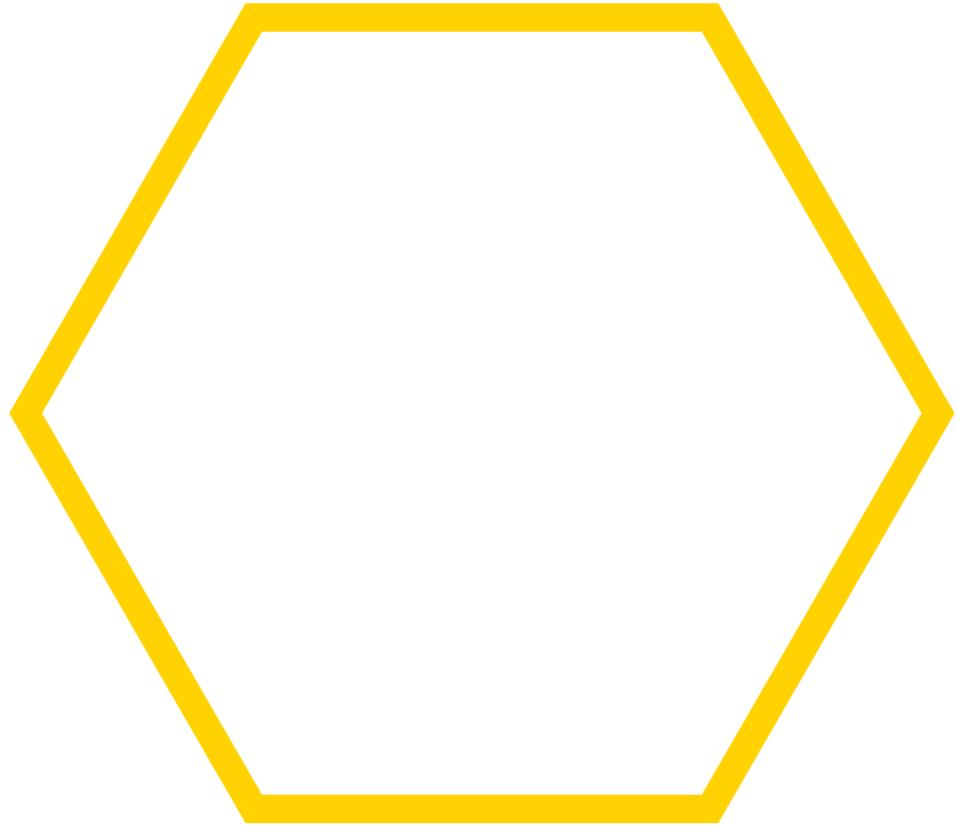
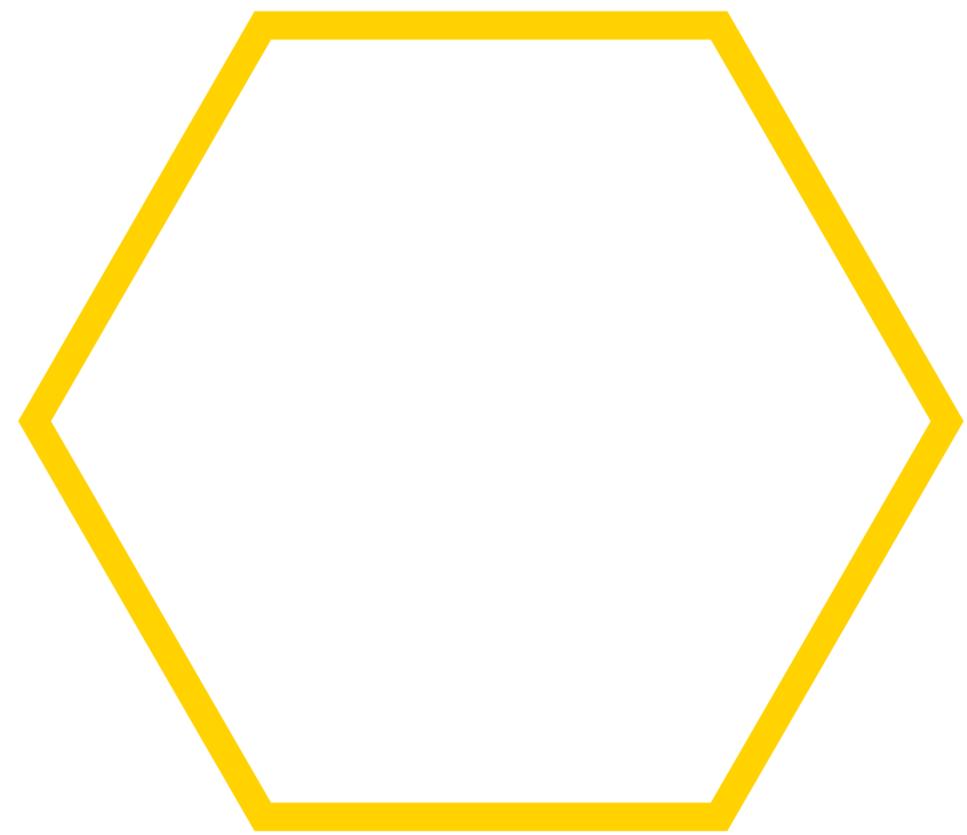
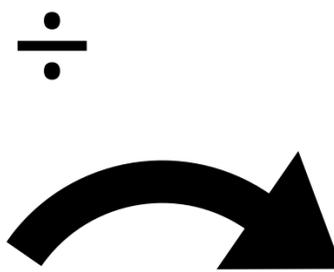
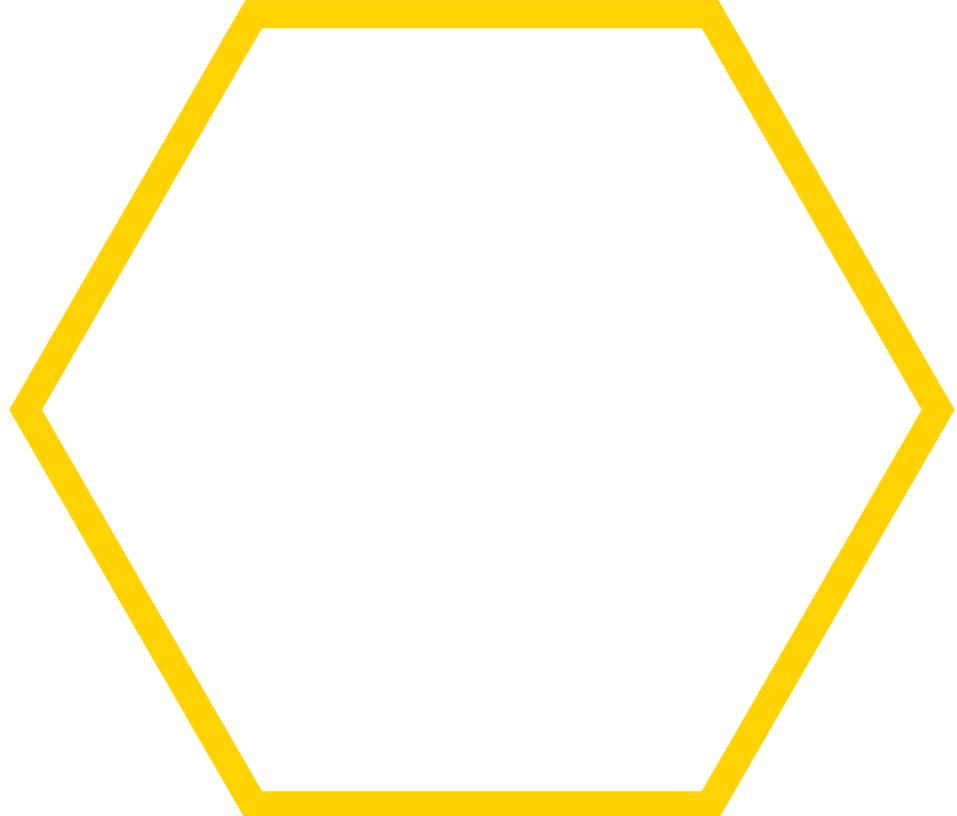


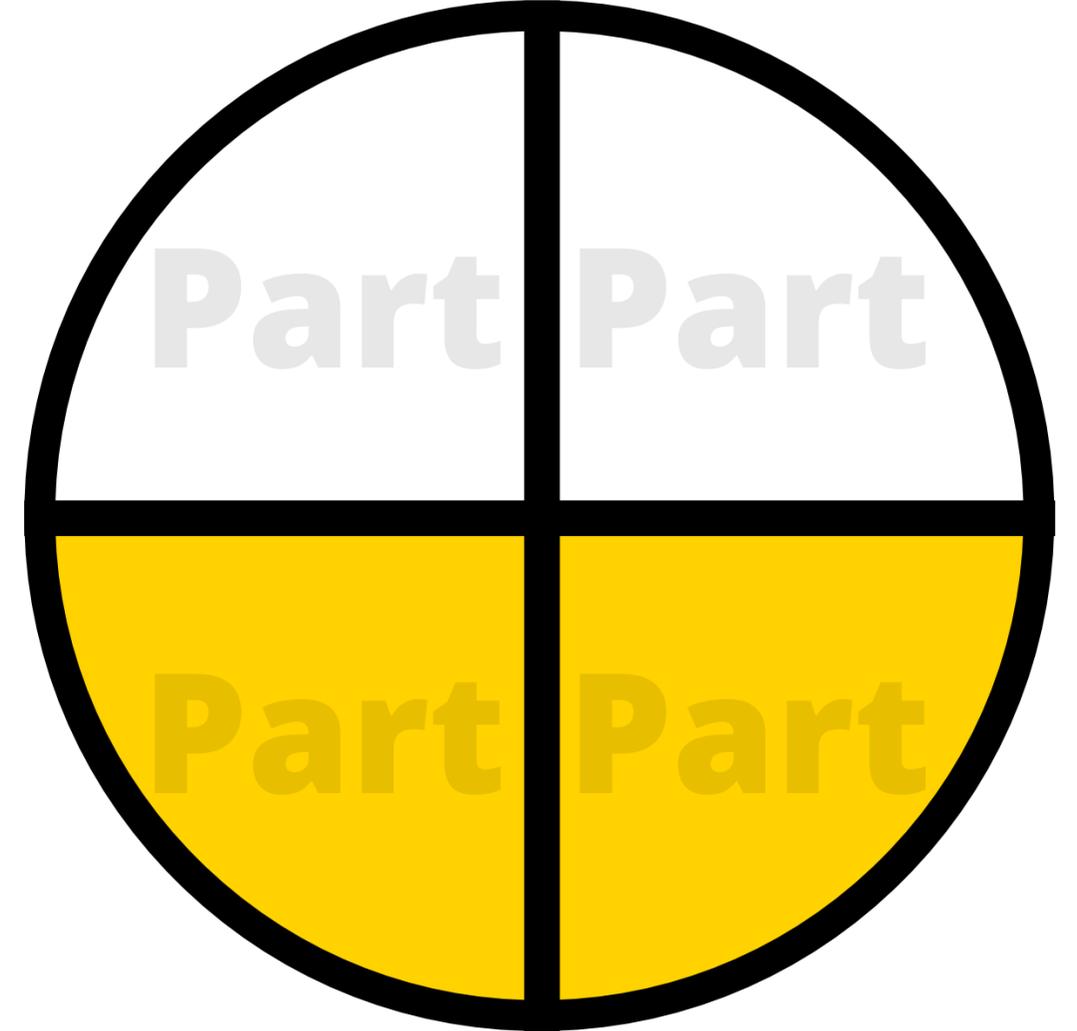
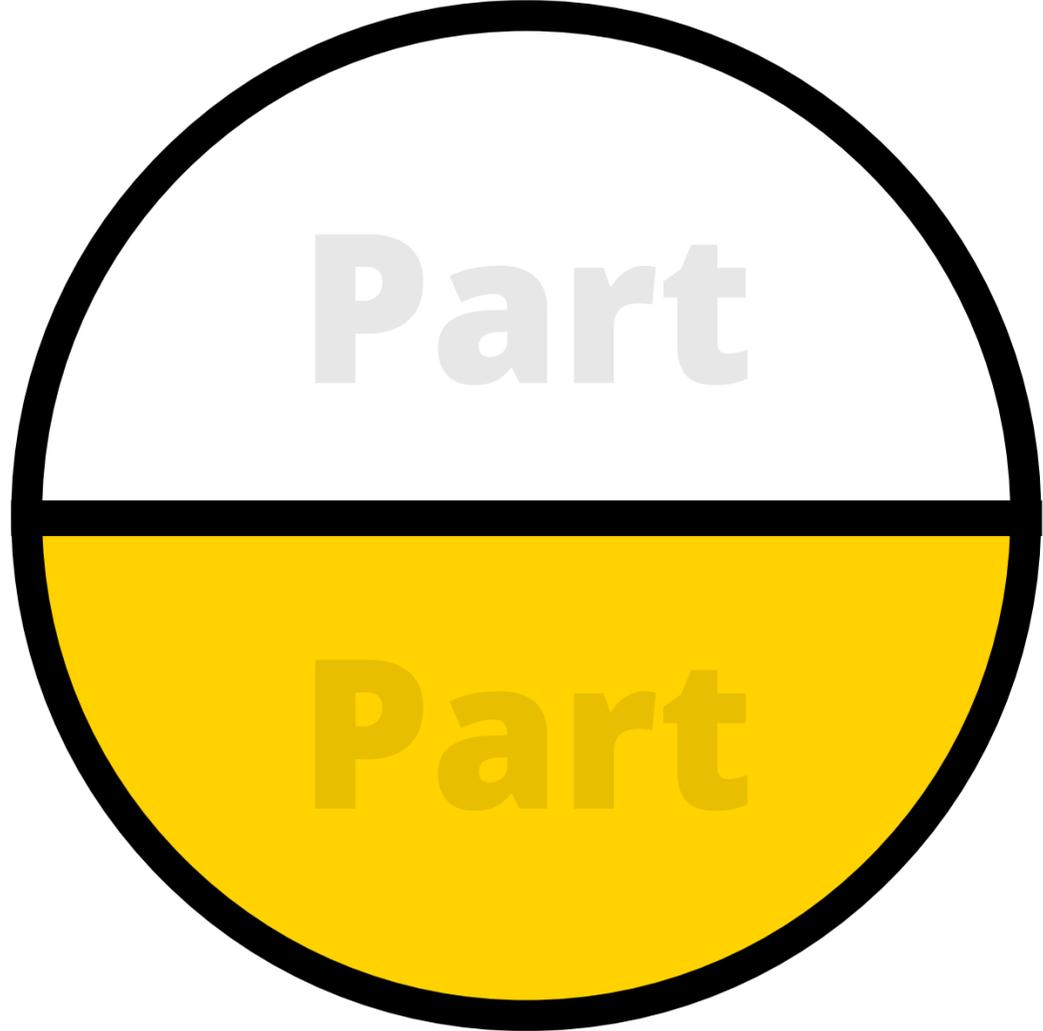


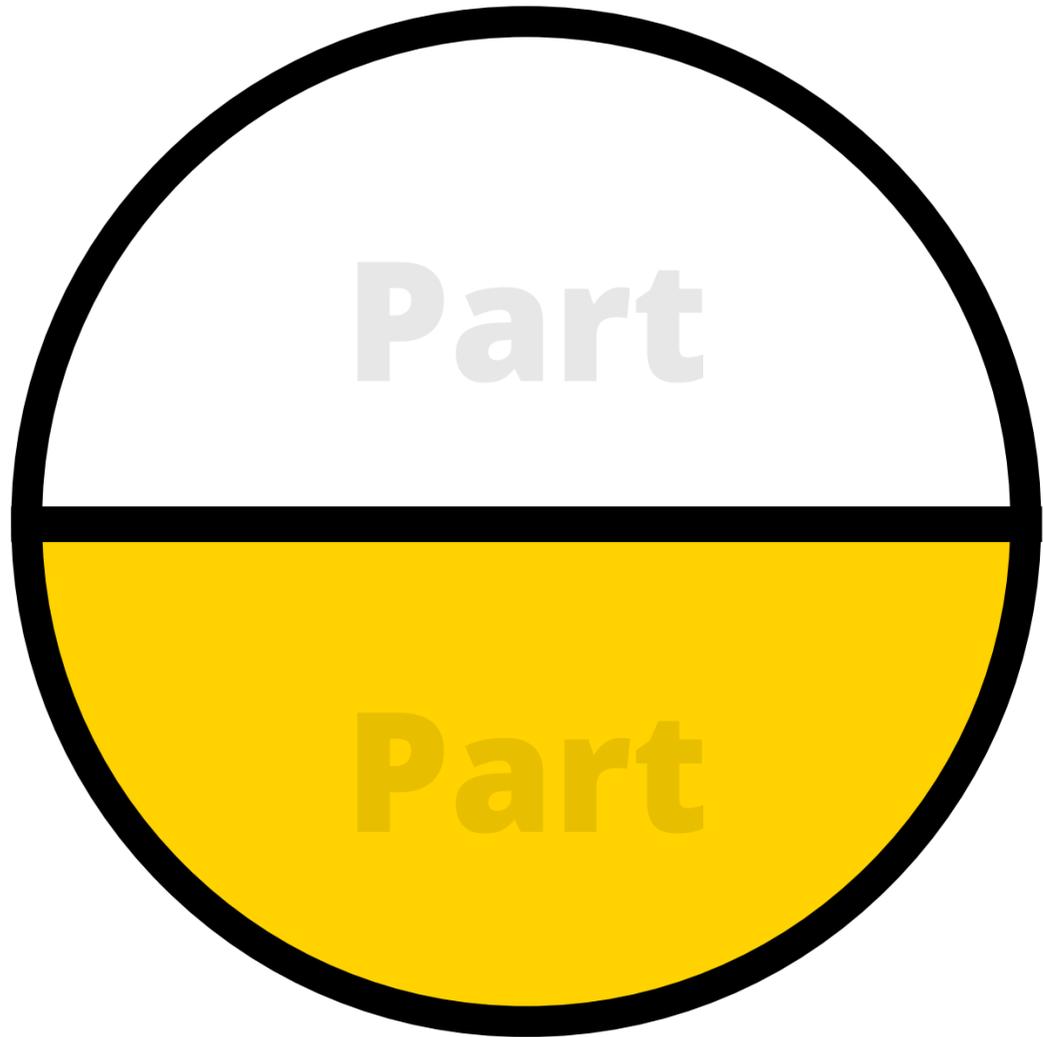






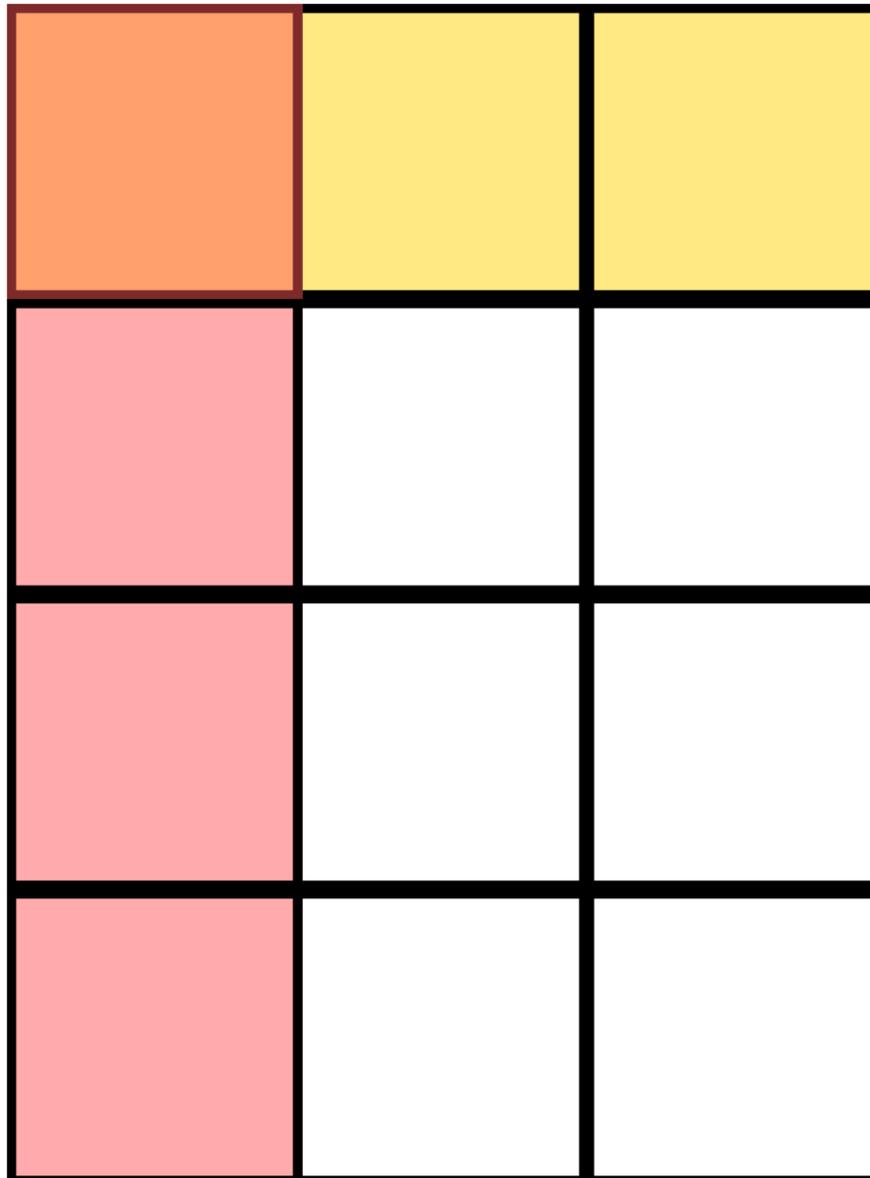






Multiplying fractions

$$\frac{1}{3}$$

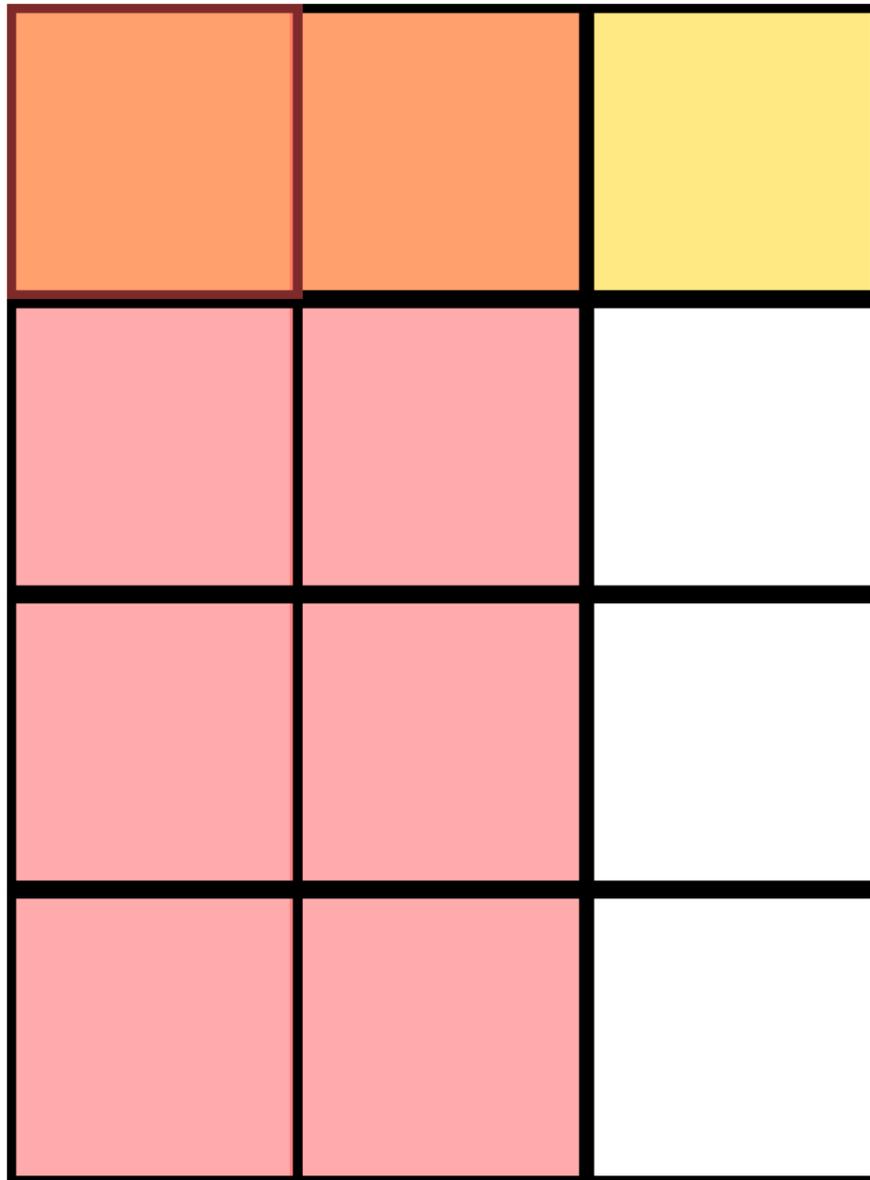


$$\frac{1}{4}$$

$$\frac{1}{4} \times \frac{1}{3} = \frac{1}{12}$$

Multiplying fractions

$$\frac{1}{3}$$



$$\frac{2}{4}$$

$$\frac{2}{4} \times \frac{1}{3} = \frac{2}{12} = \frac{1}{6}$$