Display Master: Key Idea: 3s and 7s

- Unknown facts can be found by taking apart an unknown fact into known facts.

★**M STAR**
INTERVENTION

Display Master: Partially Completed Multiplication Table

| 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			15					30	33	
4	4	8			20					40	44	
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12			30					60	66	
7	7	14			35					70	77	
8	8	16			40					80	88	
9	9	18			45					90	99	
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			60					120	132	

Display Master: Take Apart 3

$$3 = 2 + 1$$

$2 + 1 = 3$

$1 + 2 = 3$

$2 + 1 = 3$



$1 + 2 = 3$

MSTAR
INTERVENTION
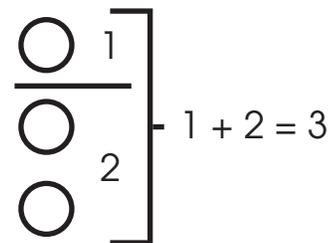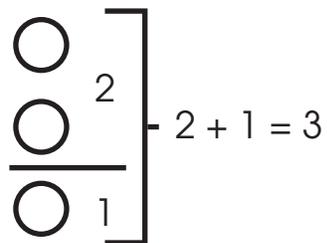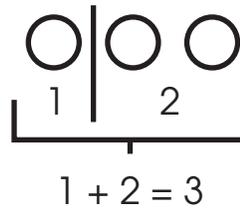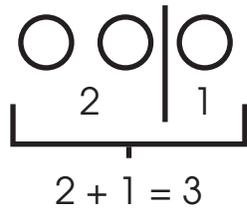
Display Master: 3 x 8 Array A

○ ○ ○ ○ ○ ○ ○ ○
○ ○ ○ ○ ○ ○ ○ ○
○ ○ ○ ○ ○ ○ ○ ○
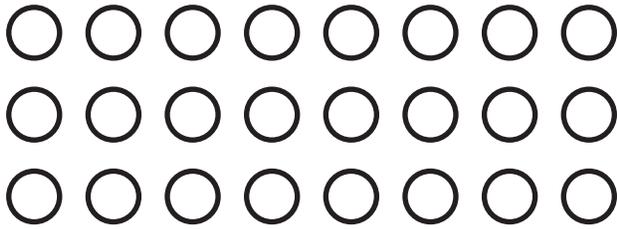
Display Master: 3 x 8 Array B

Display Master: 3 x 8 Array C

○ ○ ○ ○ ○ ○ ○ ○
○ ○ ○ ○ ○ ○ ○ ○   (2 x 8)
─────────────────────
○ ○ ○ ○ ○ ○ ○ ○   (1 x 8)
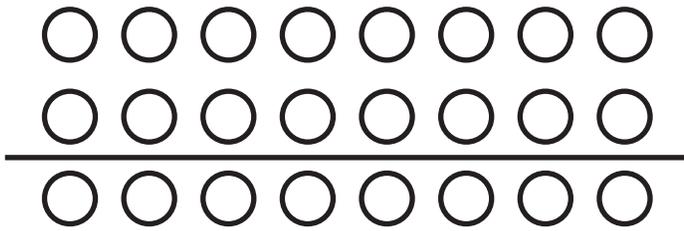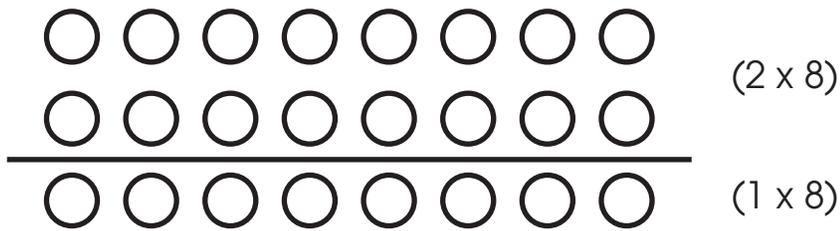
Display Master: 3 x 8 Array D

(2 x 8)

$\Longrightarrow$ (2 x 8) + (1 x 8)

(1 x 8)
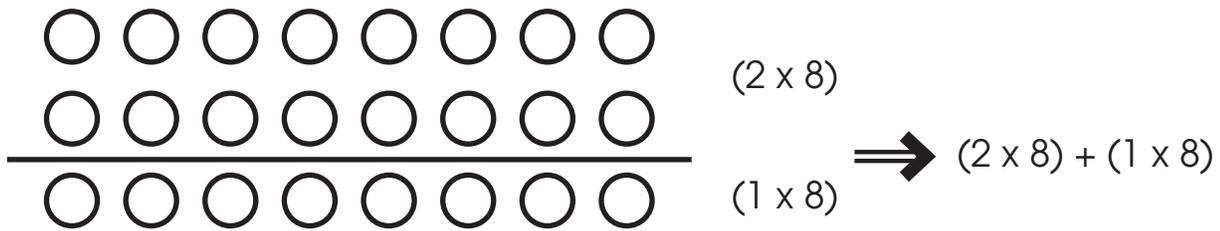
Display Master: 3 x 8 Array E


(2 x 8)

(1 x 8)

⟹ (2 x 8) + (1 x 8)

⇓   ⇓
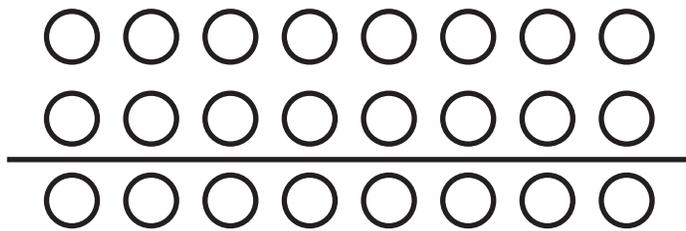
16   +   8 = 24

Display Master: 8 x 3 Array A
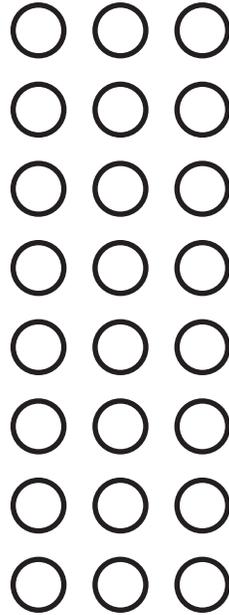
Display Master: 8 x 3 Array B

(8 x 1)   (8 x 2)
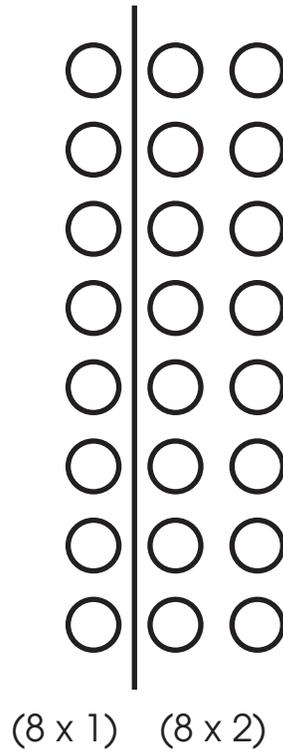
Display Master: 3s Facts A
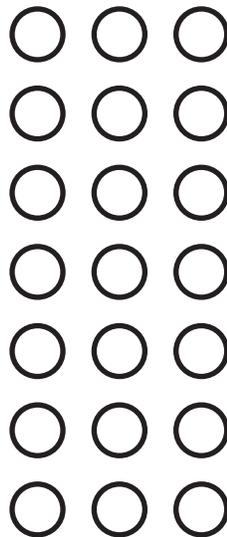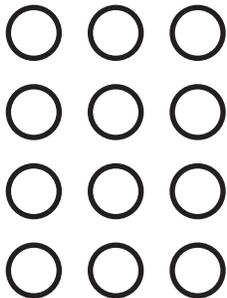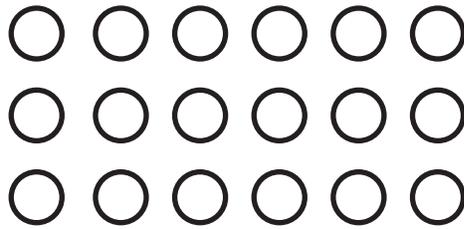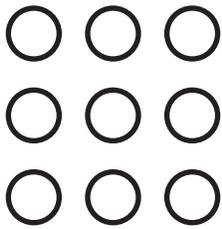
Display Master: 3s Facts B
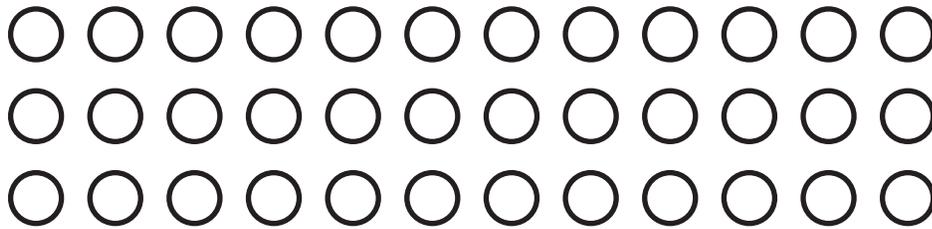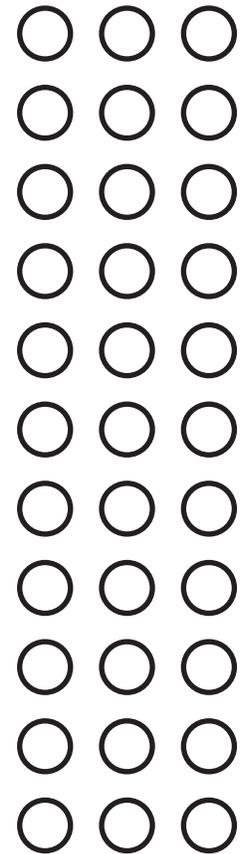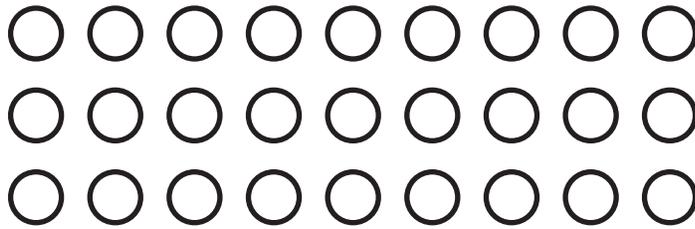
Display Master: Taking Apart 3 into 1 and 2 A

| X	1	2	1s + 2s	3
1	1	2		3
2	2	4		6
3	3	6		
4	4	8		
5	5	10		
6	6	12		
7	7	14		
8	8	16		
9	9	18		
10	10	20		
11	11	22		
12	12	24		

Display Master: Taking Apart 3 into 1 and 2 B

X	1	2	1s + 2s	3
1	1	2	1 + 2	3
2	2	4	2 + 4	6
3	3	6	3 + 6	9
4	4	8	4 + 8	12
5	5	10	5 + 10	15
6	6	12	6 + 12	18
7	7	14	7 + 14	21
8	8	16	8 + 16	24
9	9	18	9 + 18	27
10	10	20	10 + 20	30
11	11	22	11 + 22	33
12	12	24	12 + 24	36

M★STAR
INTERVENTION

Display Master: Take Apart 7

$$7 = 2 + 5$$

$$2 + 5 = 7$$

$$5 + 2 = 7$$

$$2 + 5 = 7$$

$$5 + 2 = 7$$

☆MSTAR
INTERVENTION
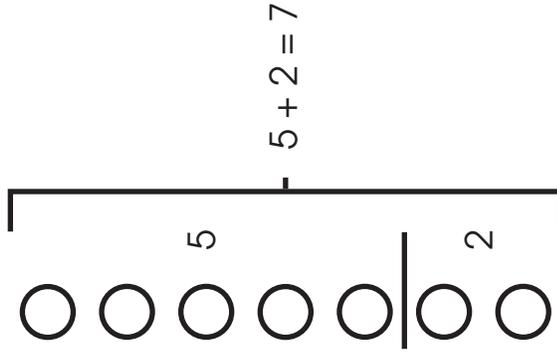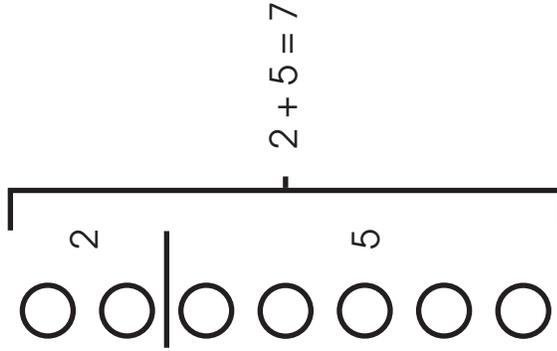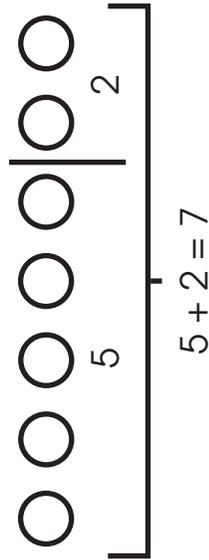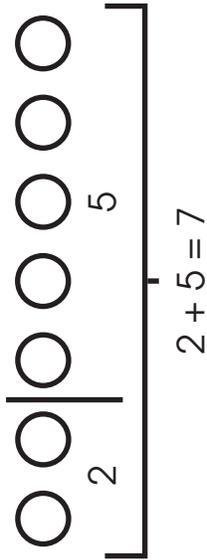
Display Master: 6 x 7 Array A
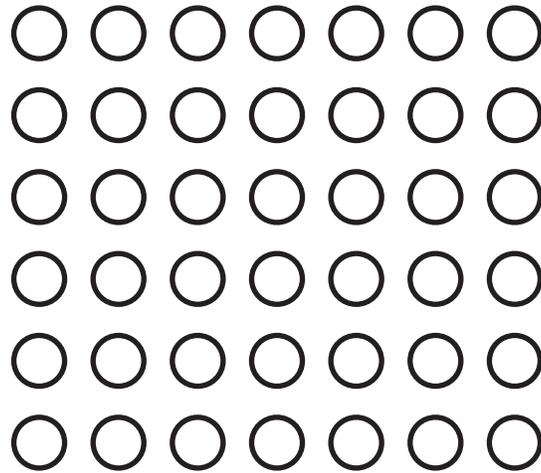
**Display Master: 6 x 7 Array B**
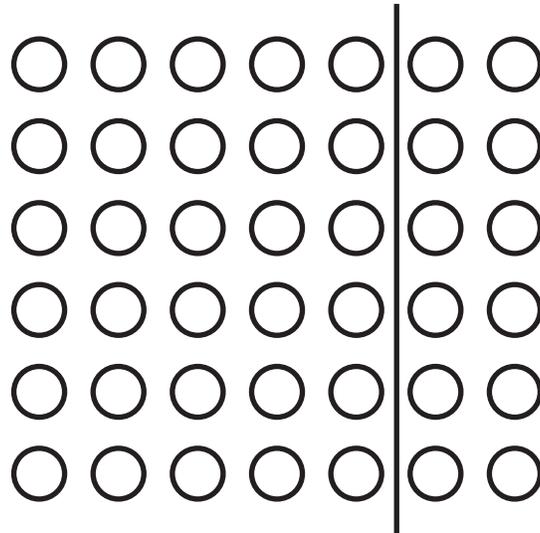
Display Master: 6 x 7 Array C

(6 x 5)   (6 x 2)
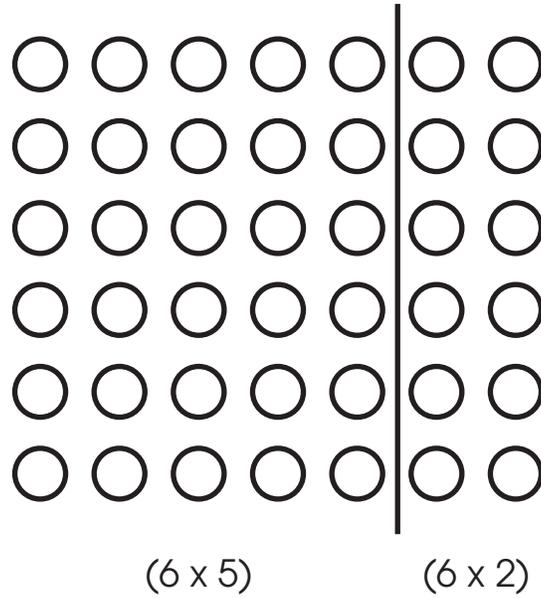
Display Master: 6 x 7 Array D

(6 x 5)   (6 x 2)

⇓

(6 x 5) + (6 x 2)
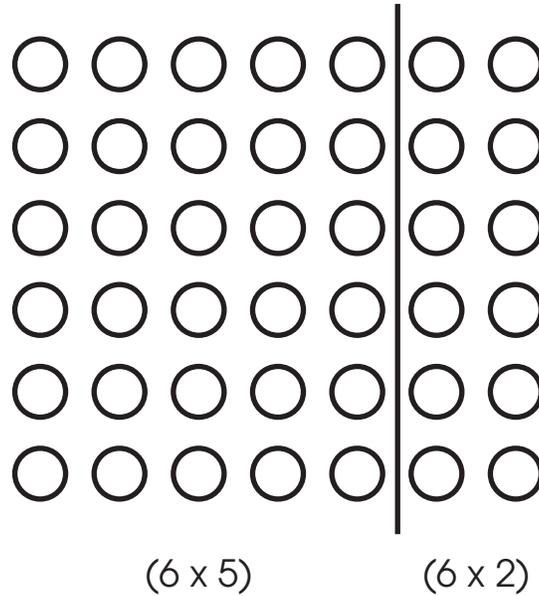
Display Master: 6 x 7 Array E

(6 x 5)   (6 x 2)

⇓

(6 x 5) + (6 x 2)

⇓   ⇓
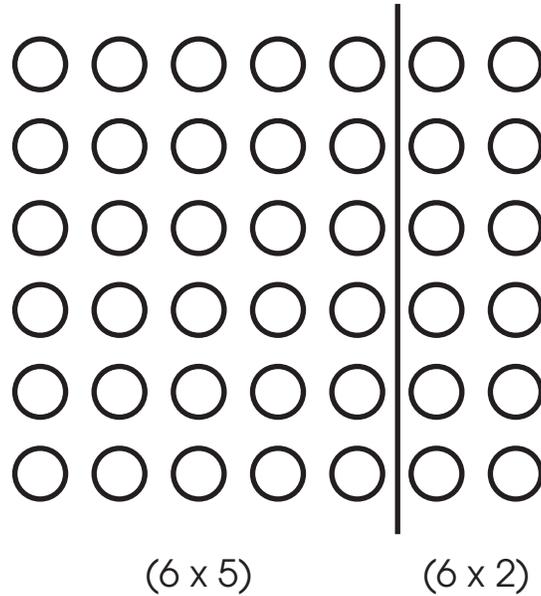
30   +   12 = 42

Display Master: 7 x 6 Array A

Display Master: 7 x 6 Array B

(5 x 6)

(2 x 6)

MSTAR
INTERVENTION
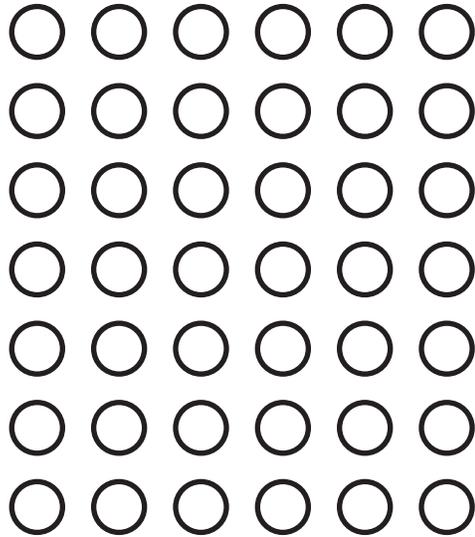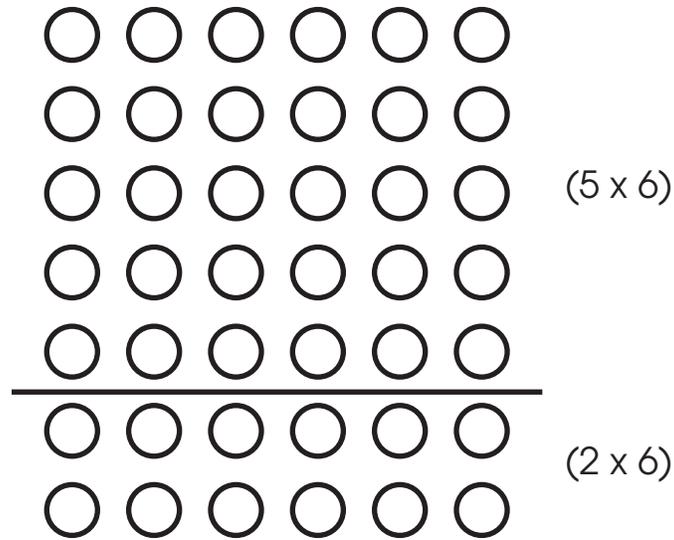
Display Master: 7s Facts A
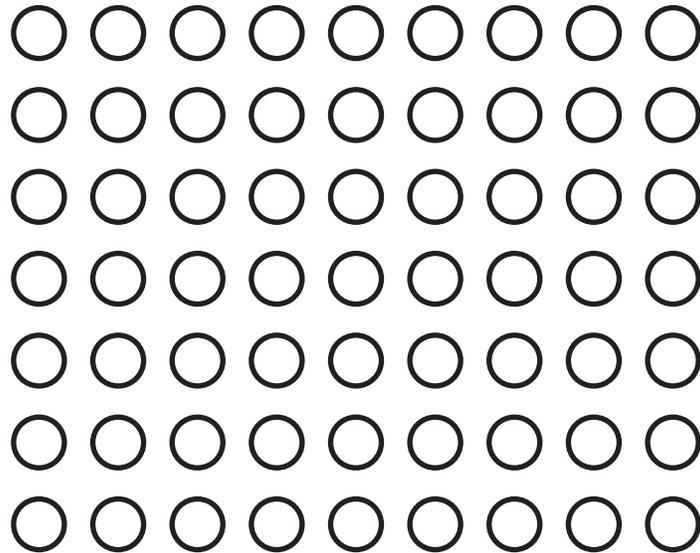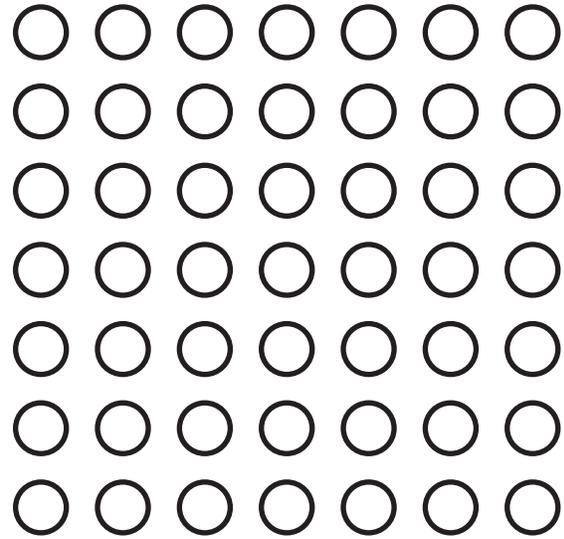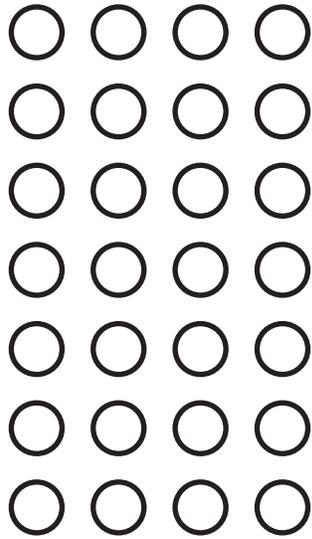
Display Master: 7s Facts B
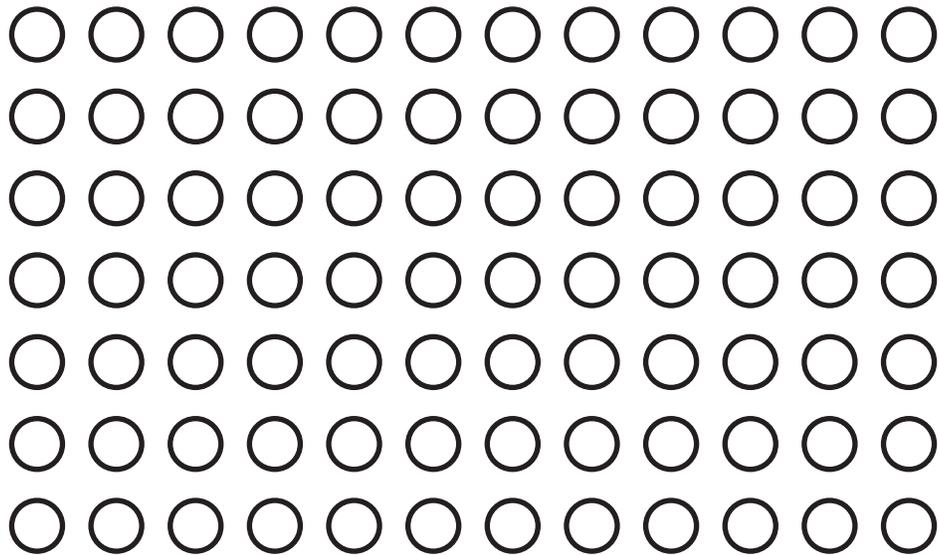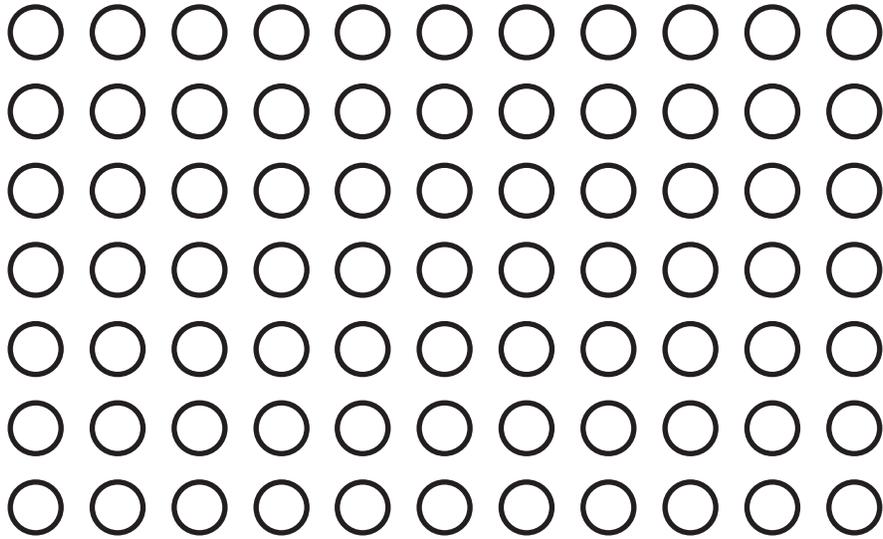
Display Master: Taking Apart 7 into 2 and 5 A

X	2	5	2s + 5s	7
1	2	5		7
2	4	10		14
3	6	15		21
4	8	20		
5	10	25		35
6	12	30		
7	14	35		
8	16	40		
9	18	45		
10	20	50		
11	22	55		
12	24	60		

MSTAR
INTERVENTION

Display Master: Taking Apart 7 into 2 and 5 B

X	2	5	2s + 5s	7
1	2	5	2 + 5	7
2	4	10	4 + 10	14
3	6	15	6 + 15	21
4	8	20	8 + 20	28
5	10	25	10 + 25	35
6	12	30	12 + 30	42
7	14	35	14 + 35	49
8	16	40	16 + 40	56
9	18	45	18 + 45	63
10	20	50	20 + 50	70
11	22	55	22 + 55	77
12	24	60	24 + 60	84

MSTAR INTERVENTION

Display Master: 3s and 7s

		x	1	2	1 + 2 → 3	4	5	6	2 + 5 → 7	8	9	10	11	12
		1	1	2		4	5	6		8	9	10	11	12
		2	2	4		8	10	12		16	18	20	22	24
1 + 2		3												
		4	4	8			20					40		
		5	5	10		20	25	30		40	45	50	55	60
		6	6	12			30					60		
2 + 5		7												
		8	8	16			40					80		
		9	9	18			45					90		
		10	10	20		40	50	60		80	90	100	110	120
		11	11	22			55					110		
		12	12	24			60					120		