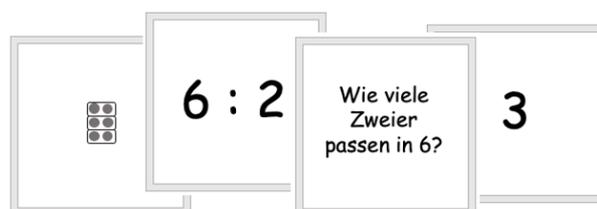


## Kopiervorlagen

# Geteiltquartett: Aufteilen

Daniela Götze und Nicole Seidel

November 2021



Dieses Material wurde durch Daniela Götze und Nicole Seidel konzipiert. Es basiert auf einer Idee aus dem Projekt Mathe inklusiv mit Pikas (vgl. <https://pikas-mi.dzlm.de/node/605>). Es kann unter der Creative Commons Lizenz BY-SA (Namensnennung – Weitergabe unter gleichen Bedingungen) 4.0 International weiterverwendet werden.

### Zitierbar als

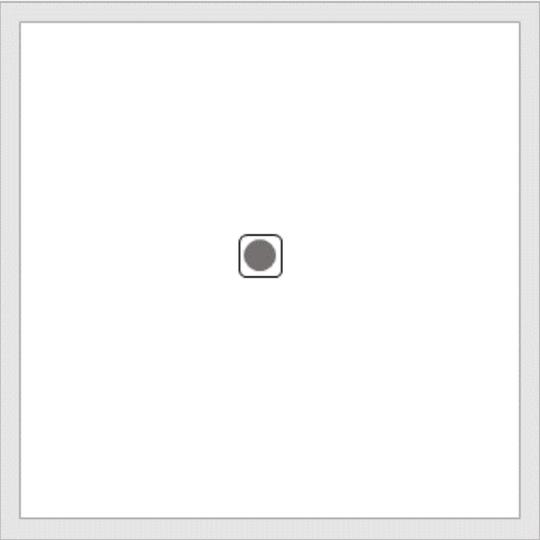
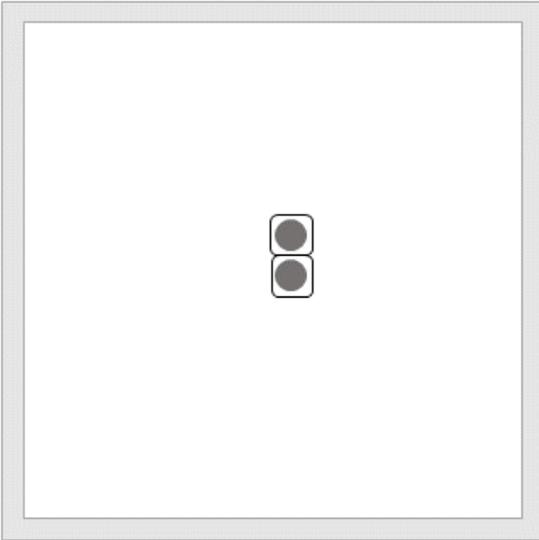
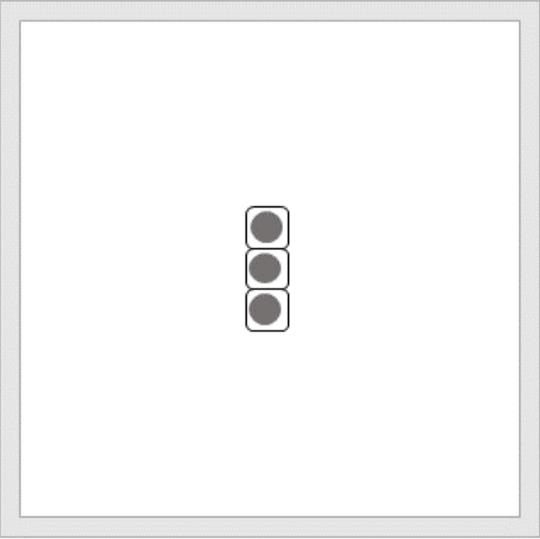
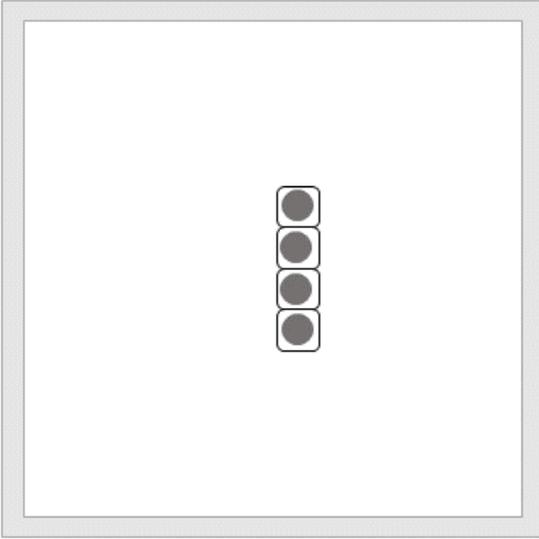
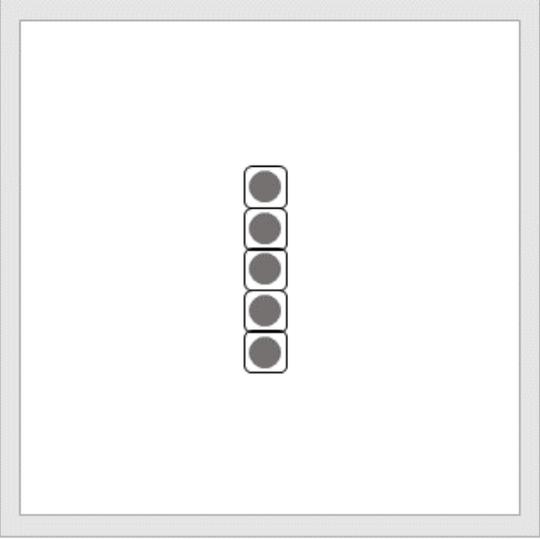
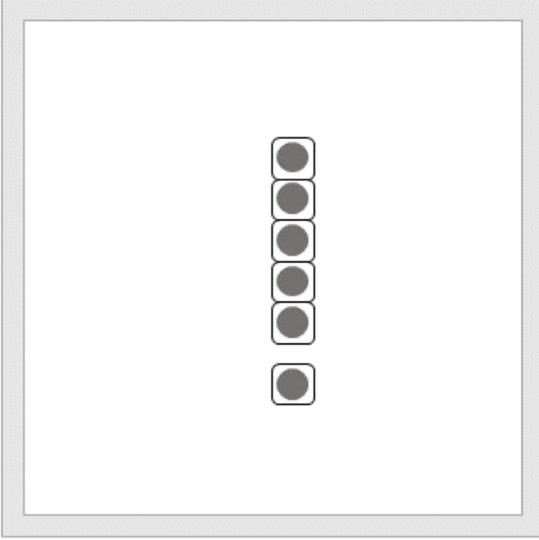
Götze, D. & Seidel, N. (2021). Geteiltquartett: Aufteilen. Open Educational Resources. Online frei zugreifbar unter <https://maco.dzlm.de/node/80>.

### Projektherkunft

Dieses Fördermaterial ist ursprünglich entstanden im Rahmen des Projekts Mathe inklusiv mit Pikas. Es wurde für das Projekt Mathematik aufholen nach Corona adaptiert und auch im Projekt QuaMath weiter genutzt (beide Projekte gemeinsam von den Ländern finanziert).

### Hinweis zu verwandtem Material

Ein Erklärvideo für Lernende und ein Video für Lehrkräfte zum didaktischen Hintergrund sind in Planung.

1 : 1

2 : 1

3 : 1

4 : 1

5 : 1

6 : 1

1

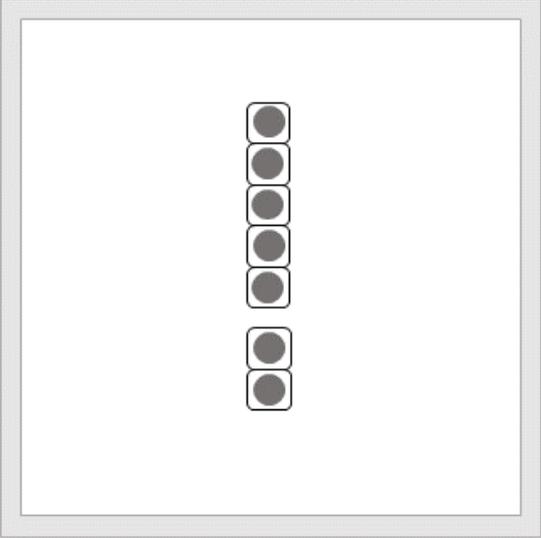
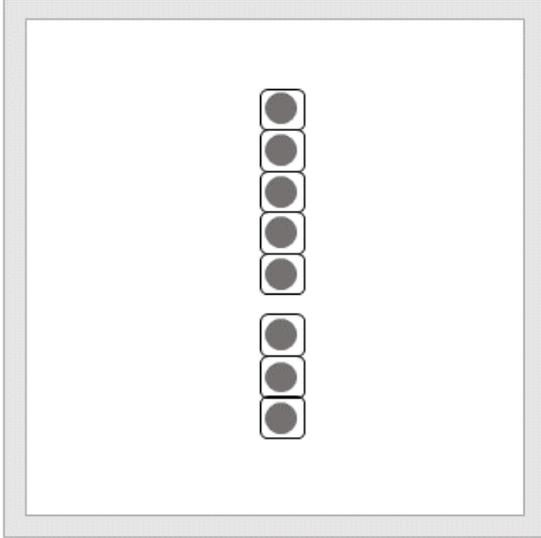
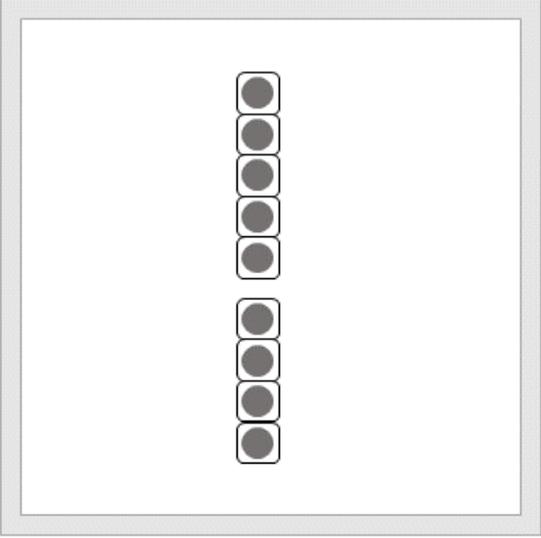
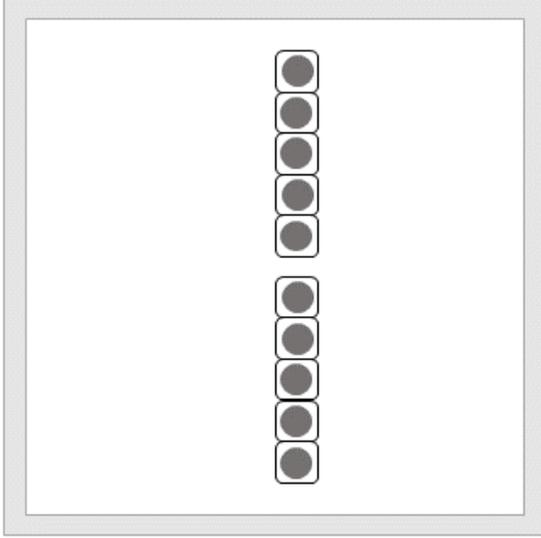
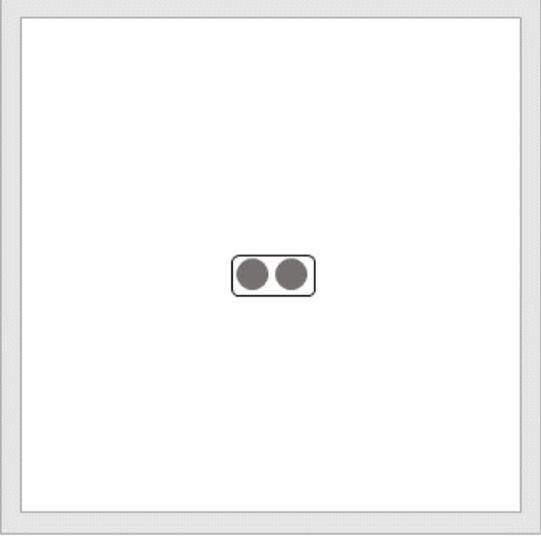
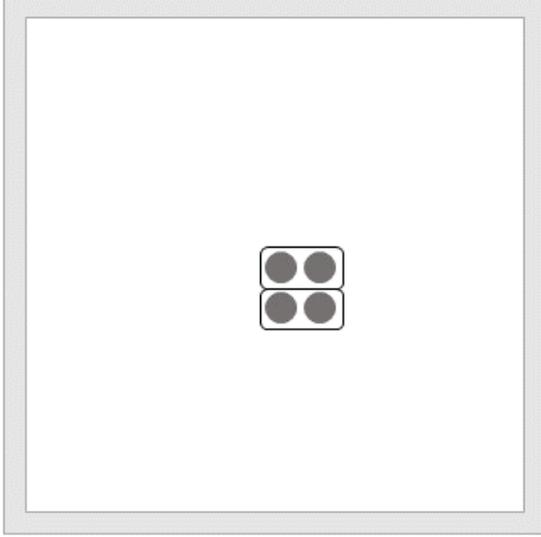
2

3

4

5

6

Wie viele  
Einer  
passen in 7?

Wie viele  
Einer  
passen in 8?

Wie viele  
Einer  
passen in 9?

Wie viele  
Einer  
passen in 10?

Wie viele  
Zweier  
passen in 4?

Wie viele  
Zweier  
passen in 4?

$7 : 1$  $8 : 1$  $9 : 1$  $10 : 1$  $2 : 2$  $4 : 2$

7

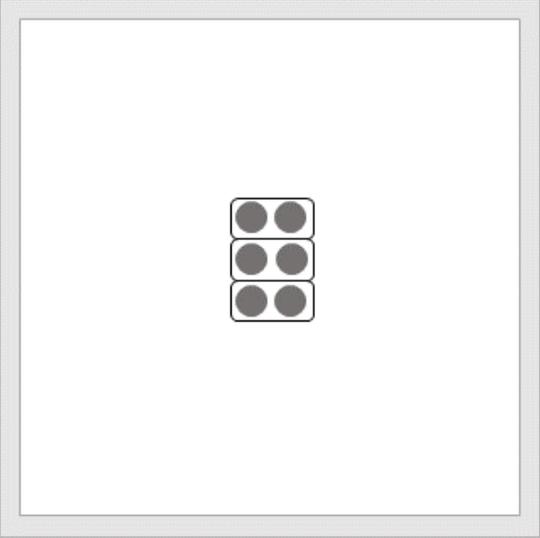
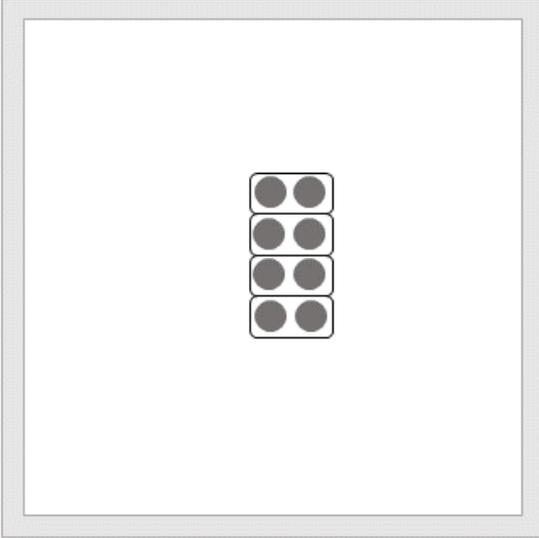
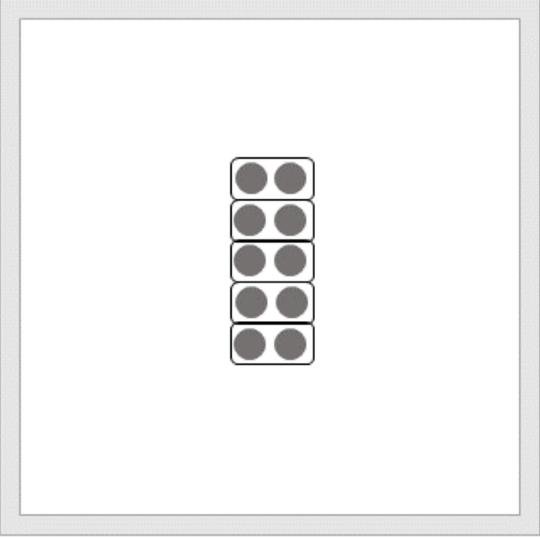
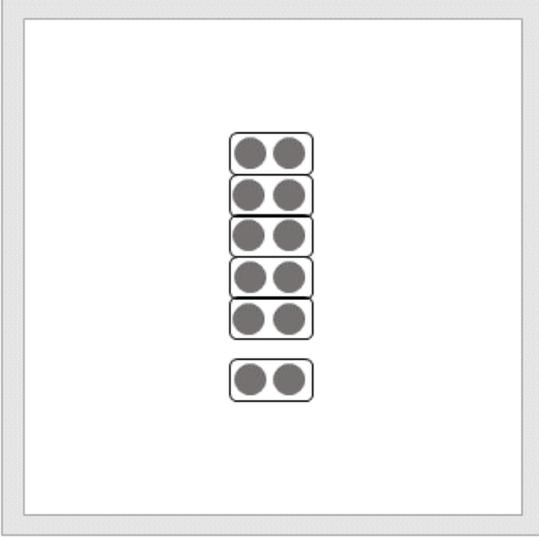
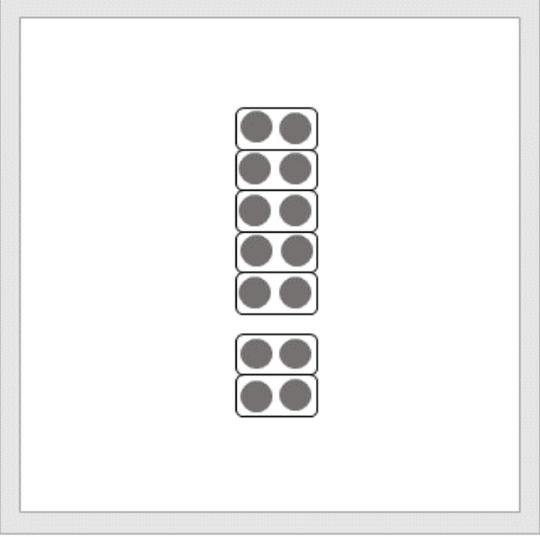
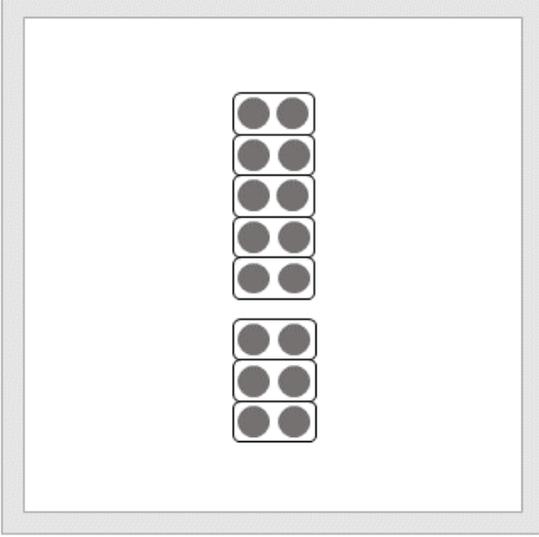
8

9

10

1

2

Wie viele  
Zweier  
passen in 6?

Wie viele  
Zweier  
passen in 8?

Wie viele  
Zweier  
passen in 10?

Wie viele  
Zweier  
passen in 12?

Wie viele  
Zweier  
passen in 14?

Wie viele  
Zweier  
passen in 16?

$$6 : 2$$

$$8 : 2$$

$$10 : 2$$

$$12 : 2$$

$$14 : 2$$

$$16 : 2$$

3

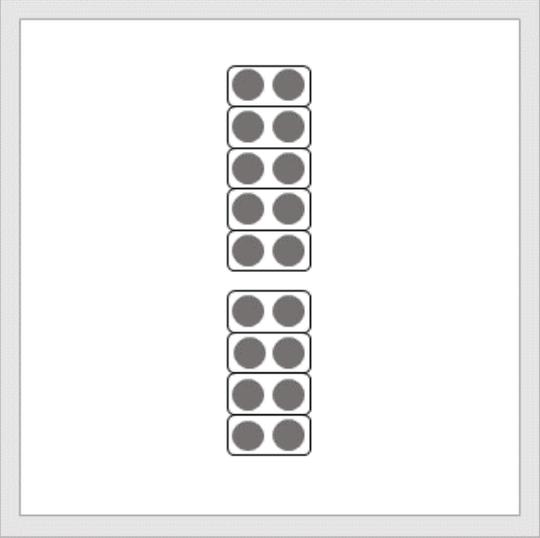
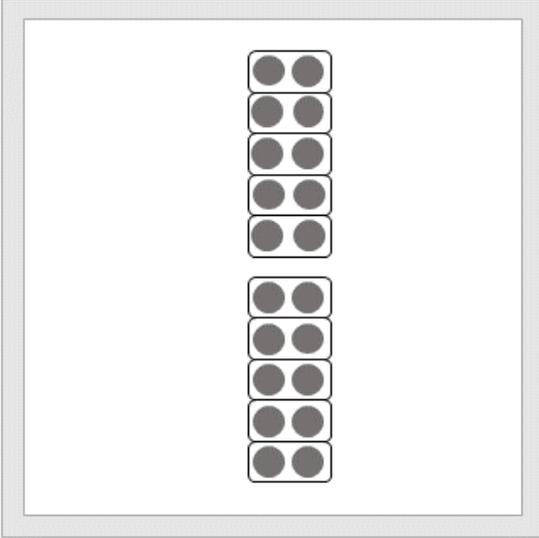
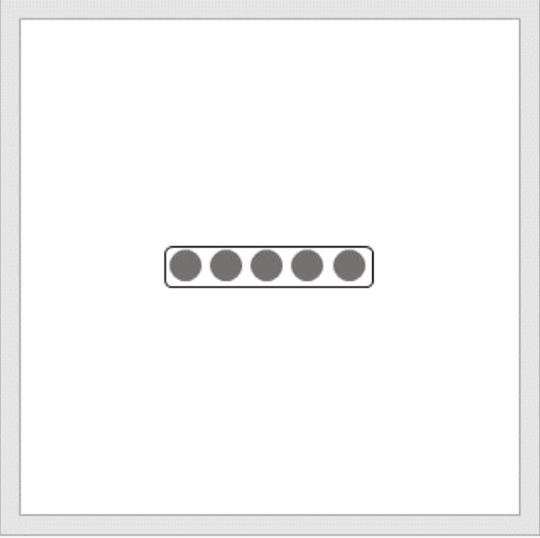
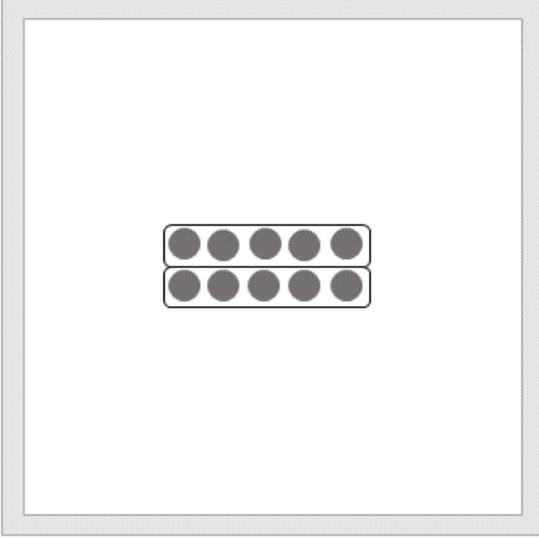
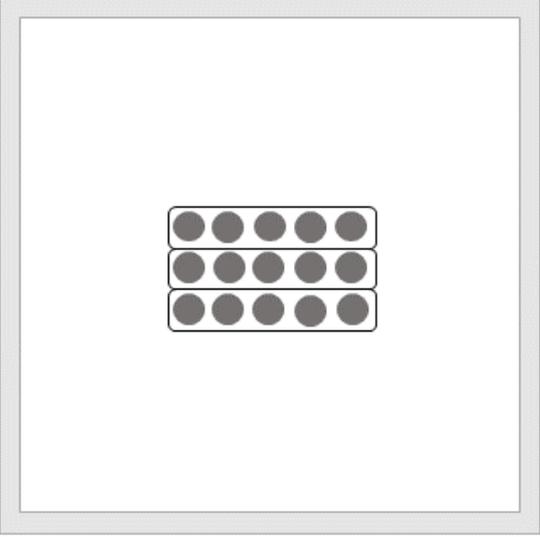
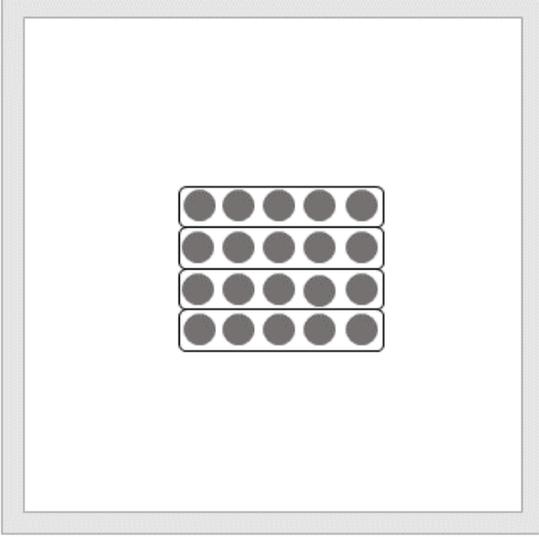
4

5

6

7

8

Wie viele  
Zweier  
passen in 18?

Wie viele  
Zweier  
passen in 20?

Wie viele  
Fünfer  
passen in 5?

Wie viele  
Fünfer  
passen in 10?

Wie viele  
Fünfer  
passen in 15?

Wie viele  
Fünfer  
passen in 20?

$$18 : 2$$

$$20 : 2$$

$$5 : 5$$

$$10 : 5$$

$$15 : 5$$

$$20 : 5$$

9

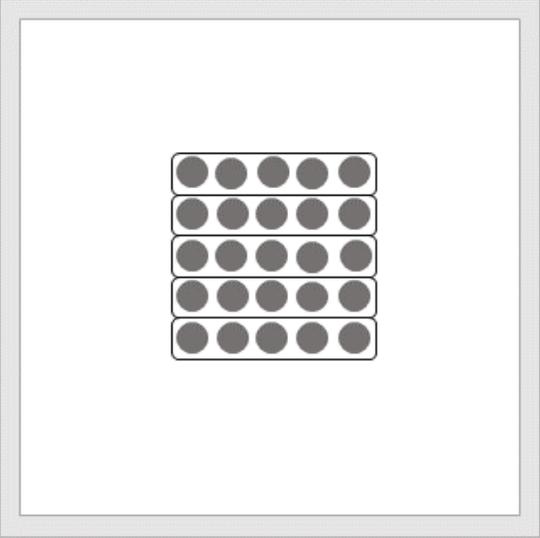
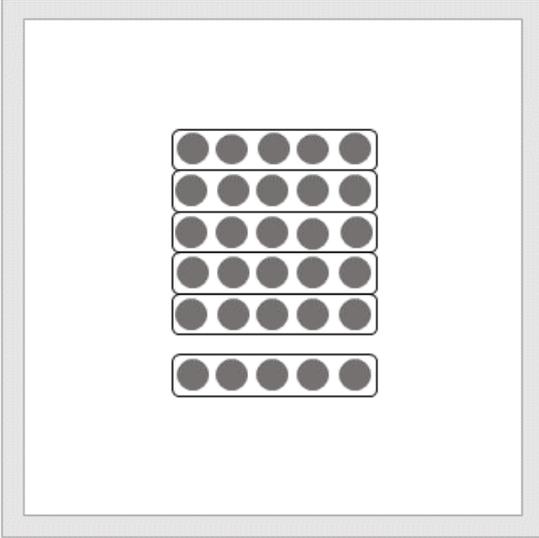
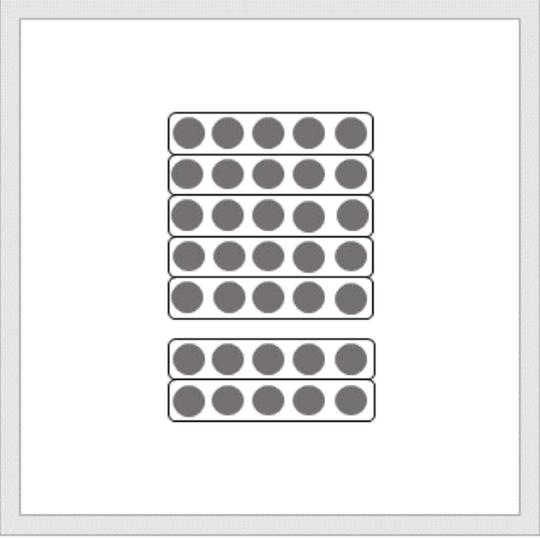
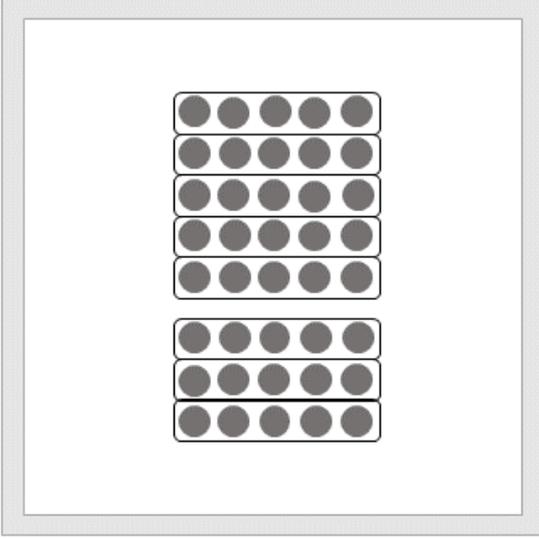
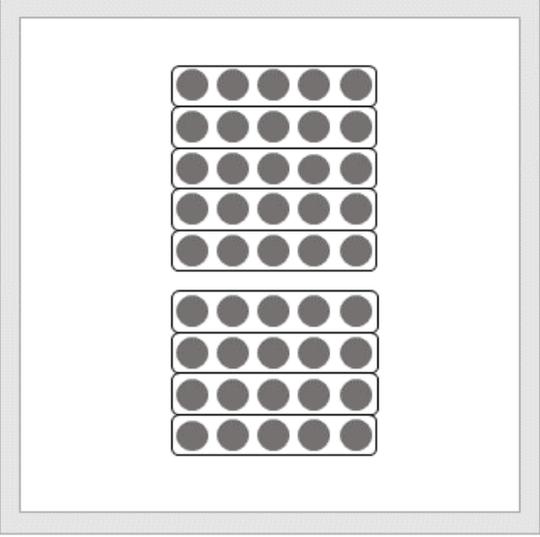
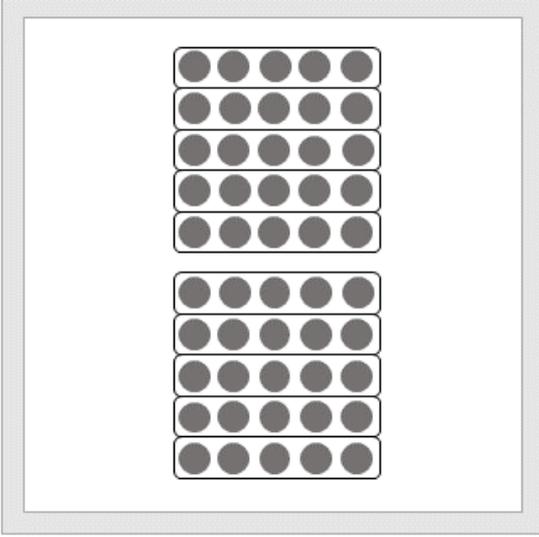
10

1

2

3

4

Wie viele  
Fünfer  
passen in 25?

Wie viele  
Fünfer  
passen in 30?

Wie viele  
Fünfer  
passen in 35?

Wie viele  
Fünfer  
passen in 40?

Wie viele  
Fünfer  
passen in 45?

Wie viele  
Fünfer  
passen in 50?

$$25 : 5$$

$$30 : 5$$

$$35 : 5$$

$$40 : 5$$

$$45 : 5$$

$$50 : 5$$

5

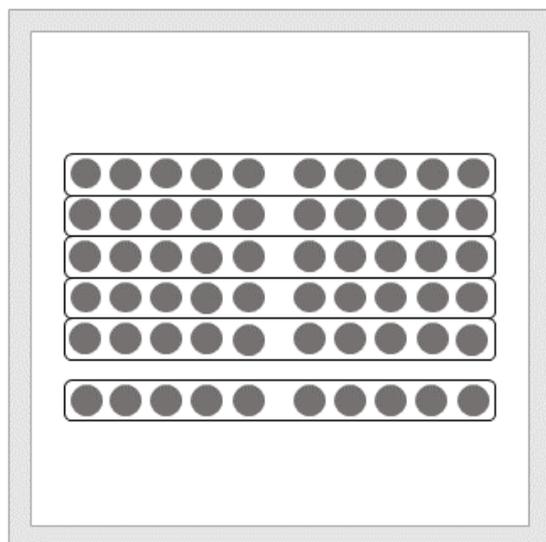
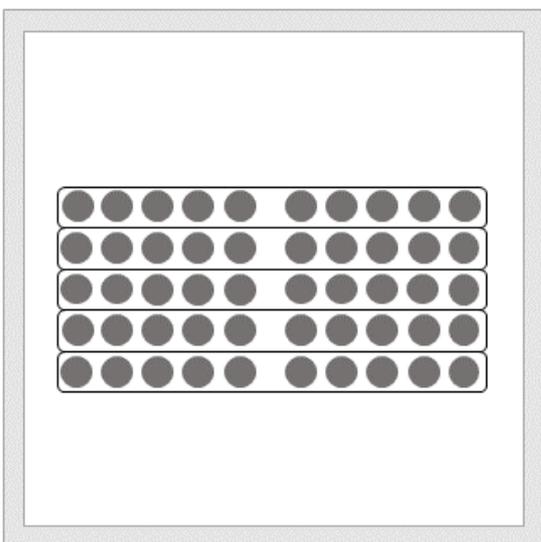
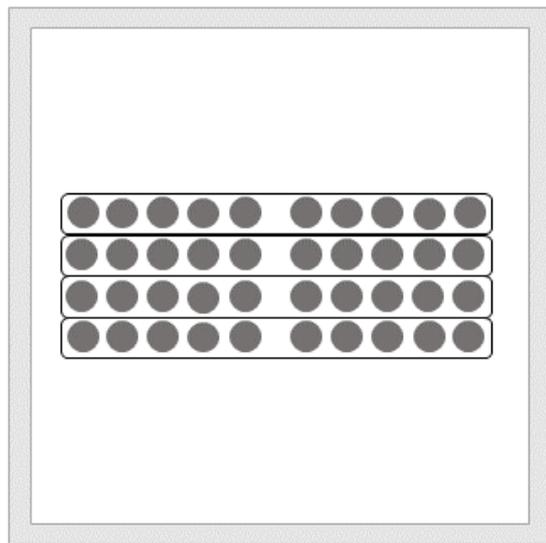
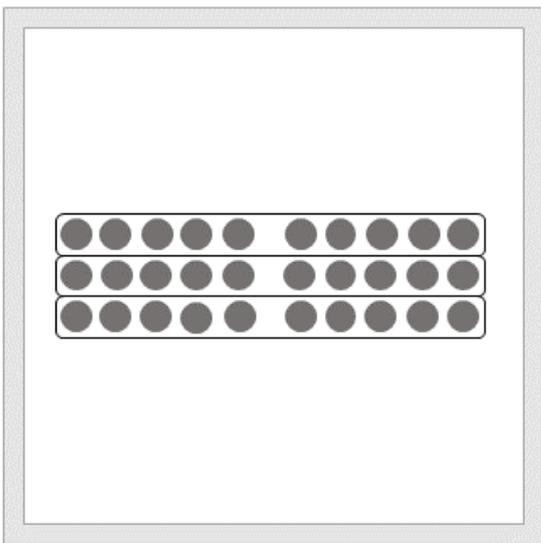
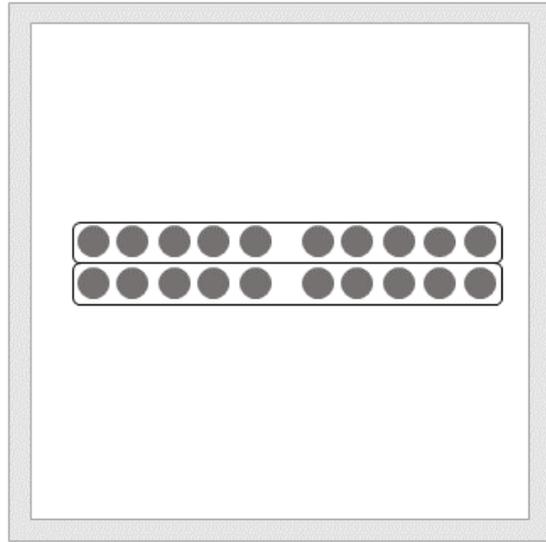
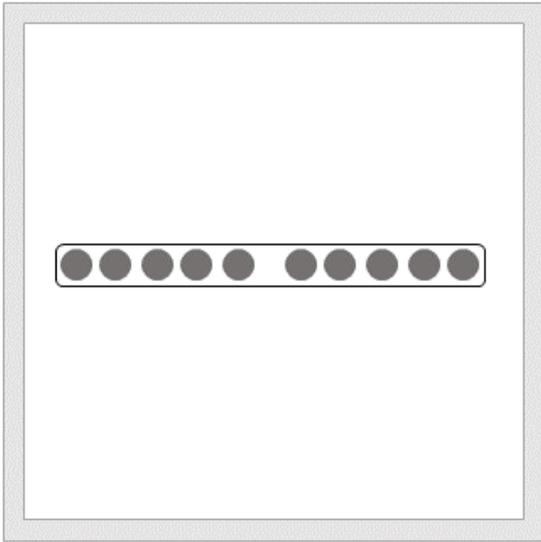
6

7

8

9

10



Wie viele  
Zehner  
passen in 10?

Wie viele  
Zehner  
passen in 20?

Wie viele  
Zehner  
passen in 30?

Wie viele  
Zehner  
passen in 40?

Wie viele  
Zehner  
passen in 50?

Wie viele  
Zehner  
passen in 60?

$$10 : 10$$

$$20 : 10$$

$$30 : 10$$

$$40 : 10$$

$$50 : 10$$

$$60 : 10$$

1

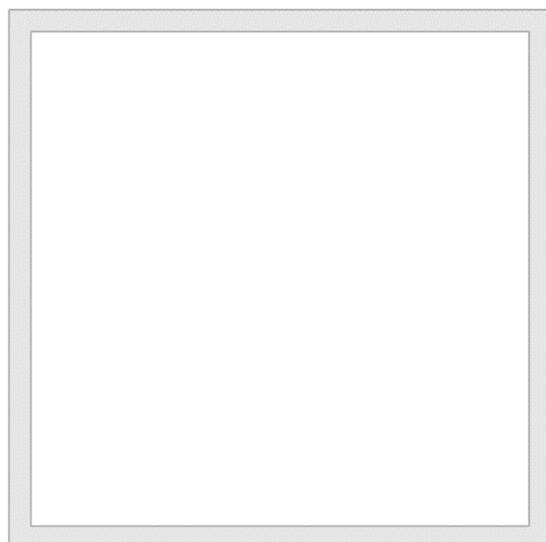
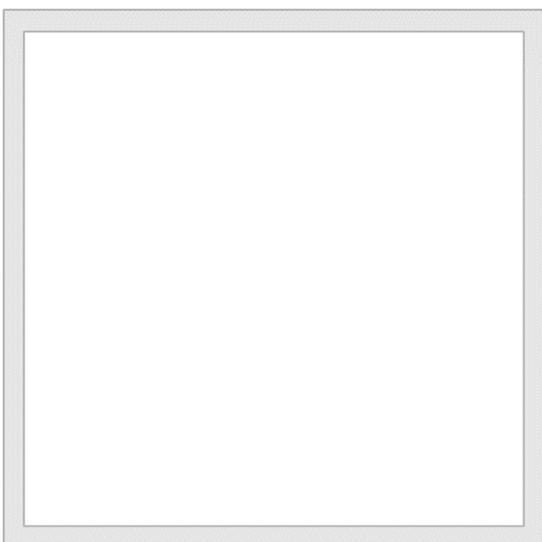
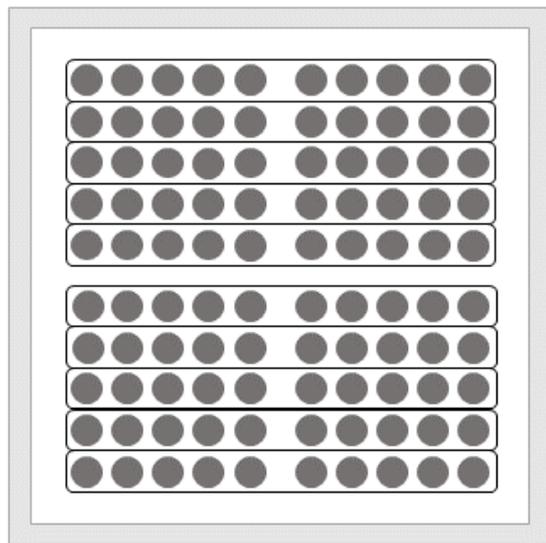
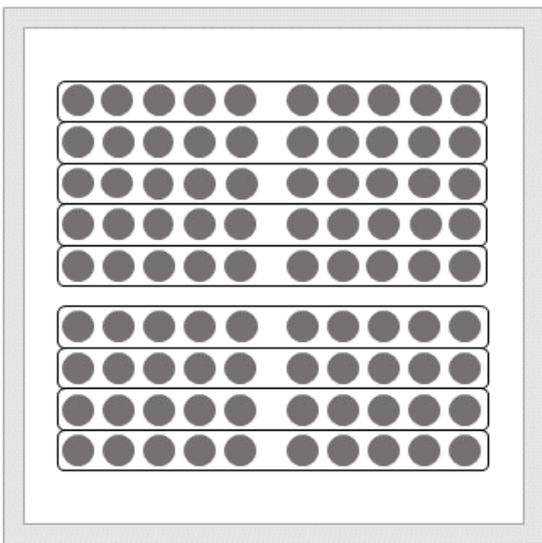
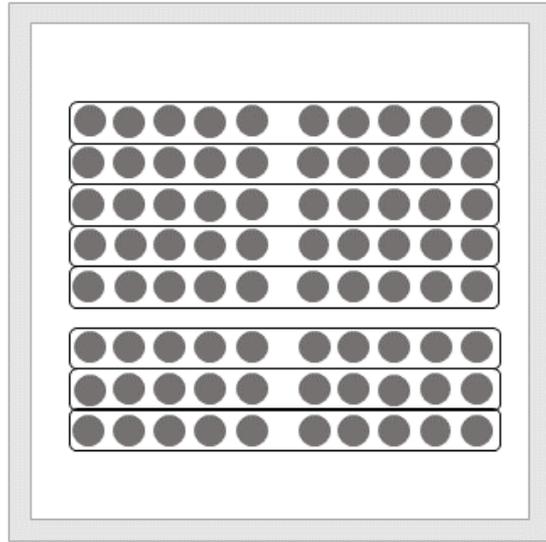
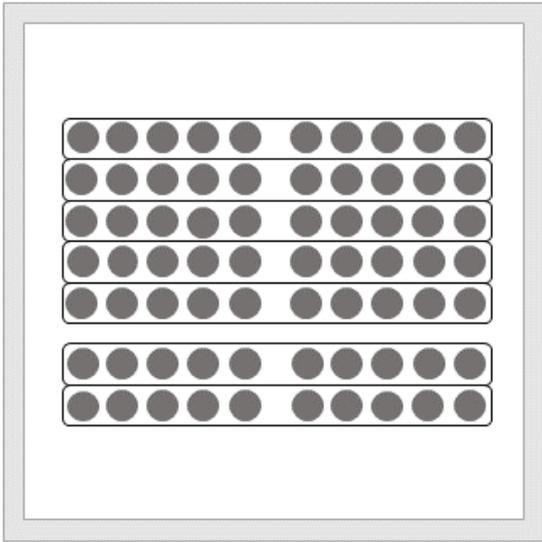
2

3

4

5

6



Wie viele  
Zehner  
passen in 70?

Wie viele  
Zehner  
passen in 80?

Wie viele  
Zehner  
passen in 90?

Wie viele  
Zehner  
passen in 100?

$$70 : 10$$

$$80 : 10$$

$$90 : 10$$

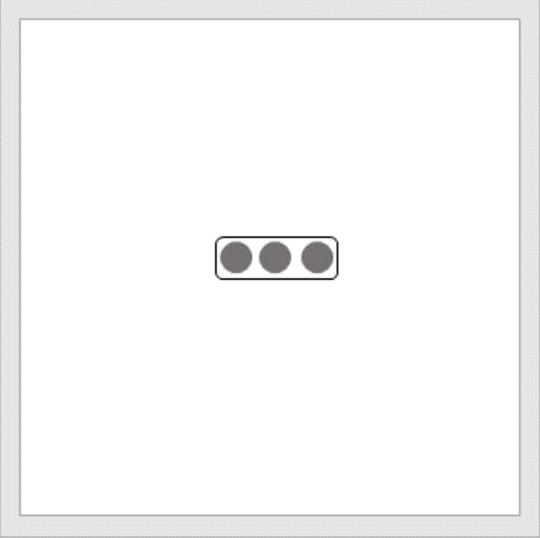
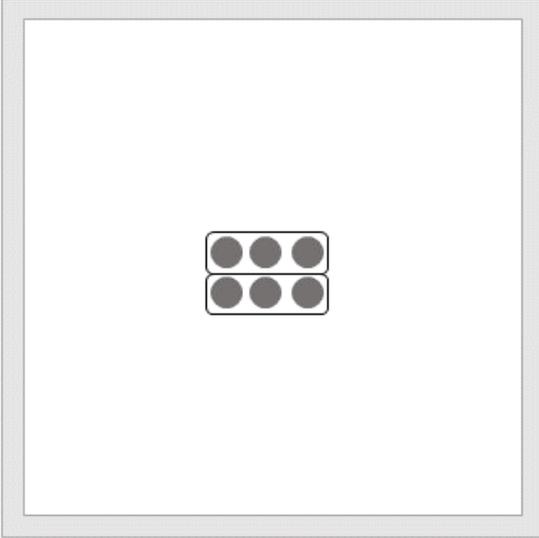
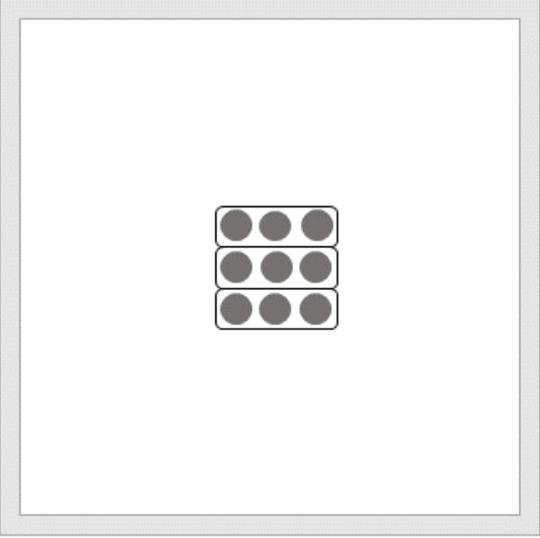
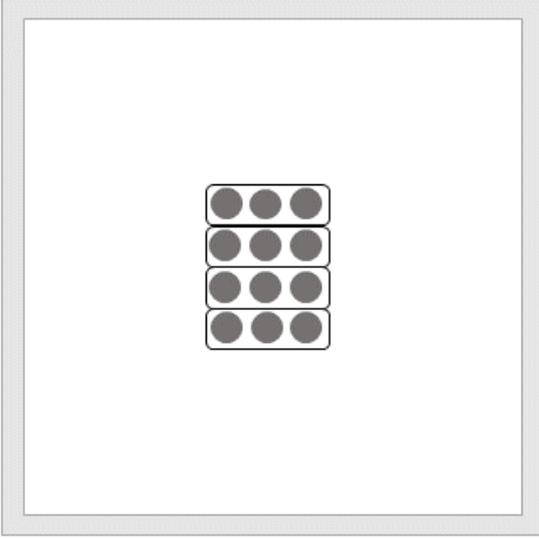
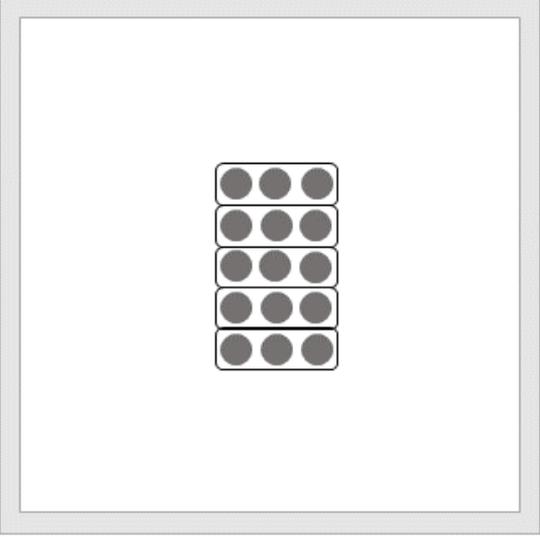
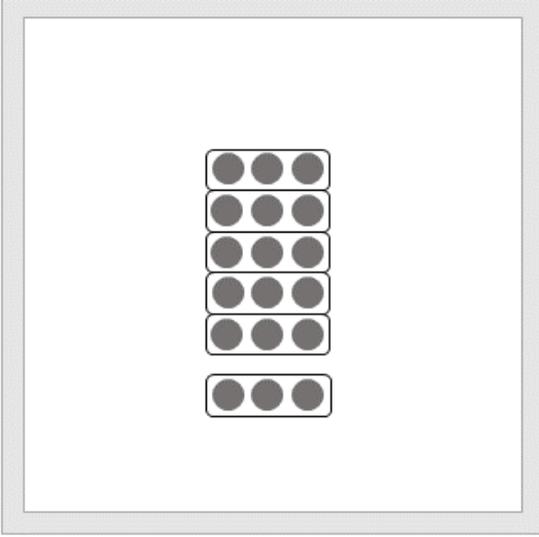
$$100 : 10$$

7

8

9

10

Wie viele  
Dreier  
passen in 3?

Wie viele  
Dreier  
passen in 6?

Wie viele  
Dreier  
passen in 9?

Wie viele  
Dreier  
passen in 12?

Wie viele  
Dreier  
passen in 15?

Wie viele  
Dreier  
passen in 18?

$$3 : 3$$

$$6 : 3$$

$$9 : 3$$

$$12 : 3$$

$$15 : 3$$

$$18 : 3$$

1

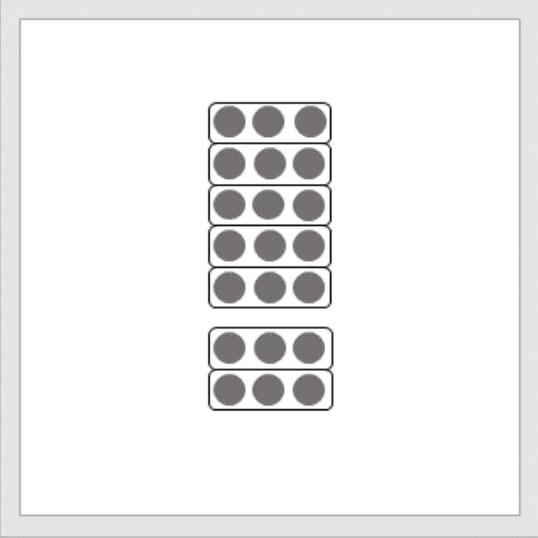
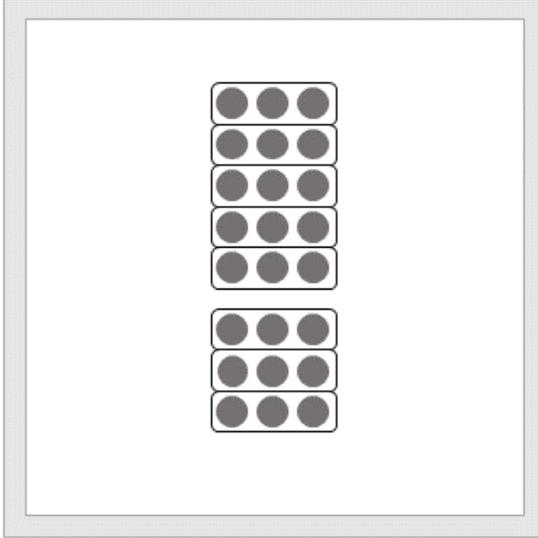
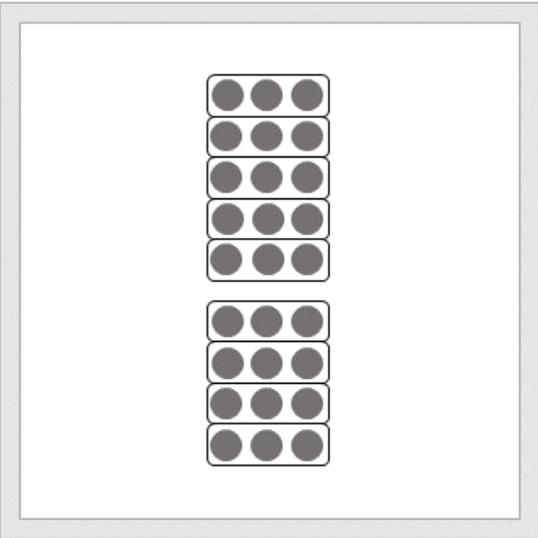
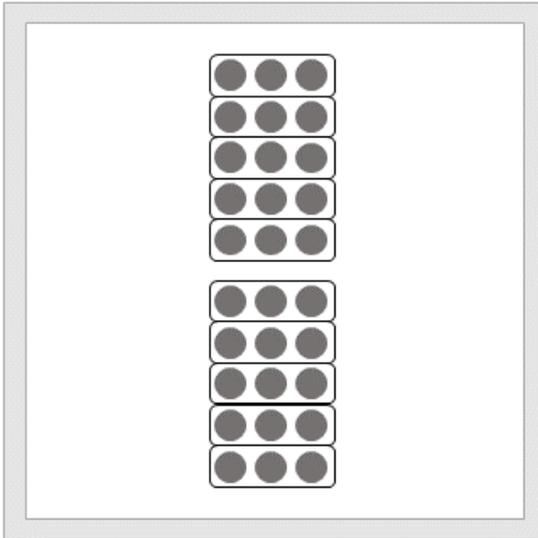
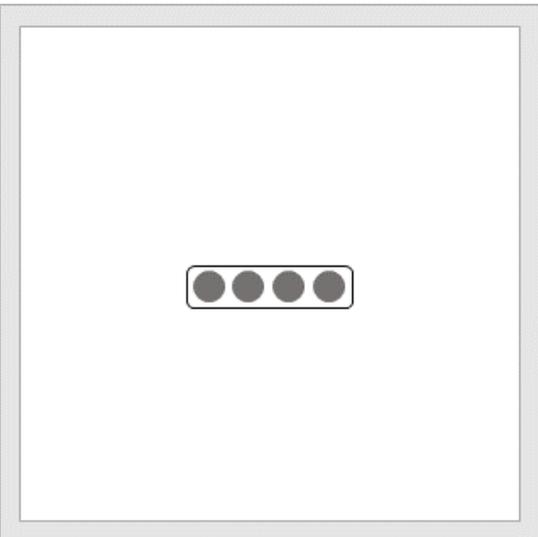
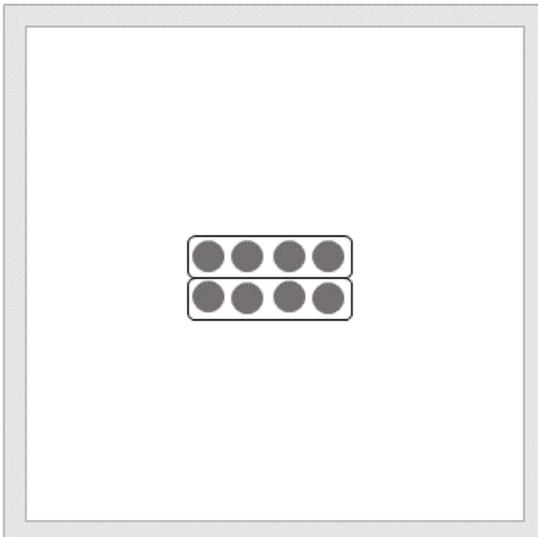
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3

4

5

6

Wie viele  
Dreier  
passen in 21?

Wie viele  
Dreier  
passen in 24?

Wie viele  
Dreier  
passen in 27?

Wie viele  
Dreier  
passen in 30?

Wie viele  
Vierer  
passen in 4?

Wie viele  
Vierer  
passen in 8?

$$21 : 3$$

$$24 : 3$$

$$27 : 3$$

$$30 : 3$$

$$4 : 4$$

$$8 : 4$$

7

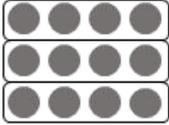
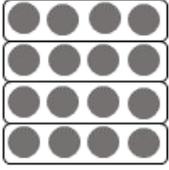
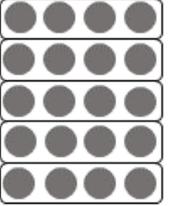
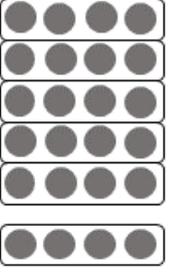
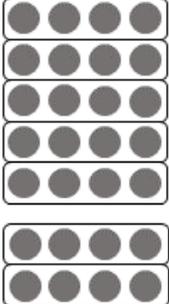
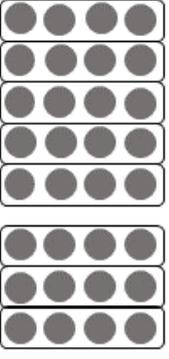
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9

10

1

2

Wie viele  
Vierer  
passen in 12?

Wie viele  
Vierer  
passen in 16?

Wie viele  
Vierer  
passen in 20?

Wie viele  
Vierer  
passen in 24?

Wie viele  
Vierer  
passen in 28?

Wie viele  
Vierer  
passen in 32?

$$12 : 4$$

$$16 : 4$$

$$20 : 4$$

$$24 : 4$$

$$28 : 4$$

$$32 : 4$$

3

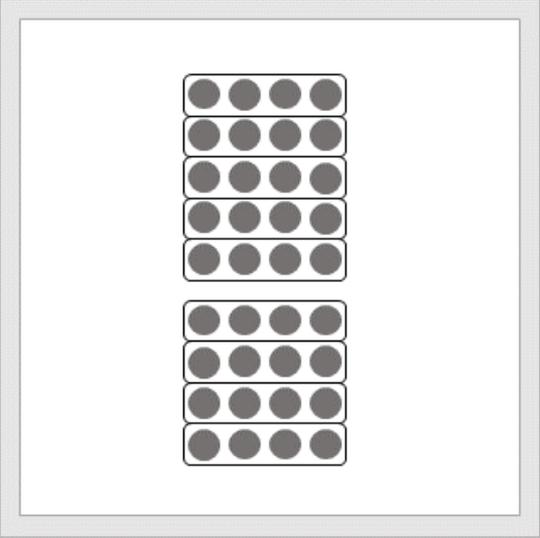
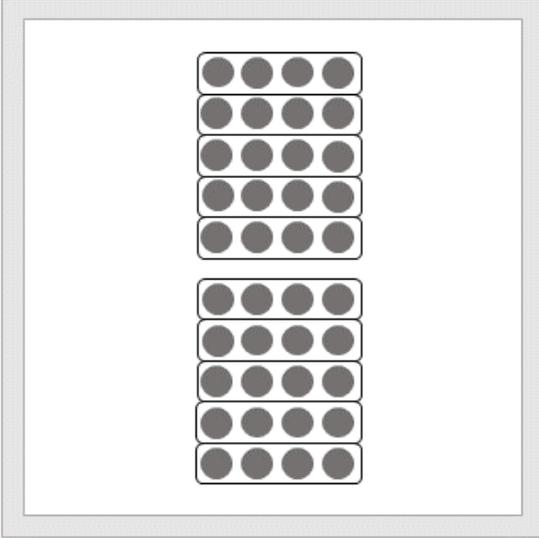
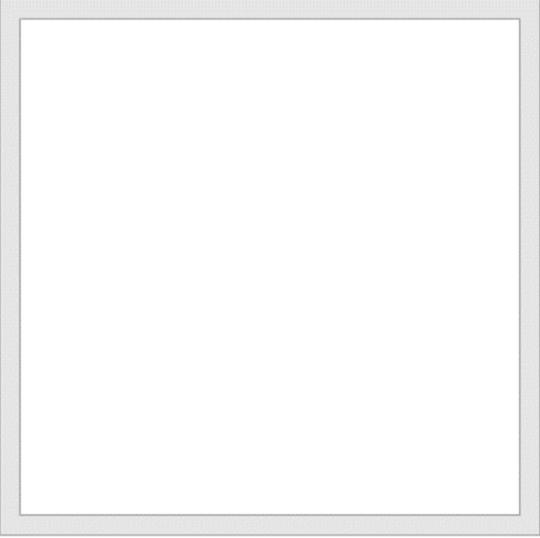
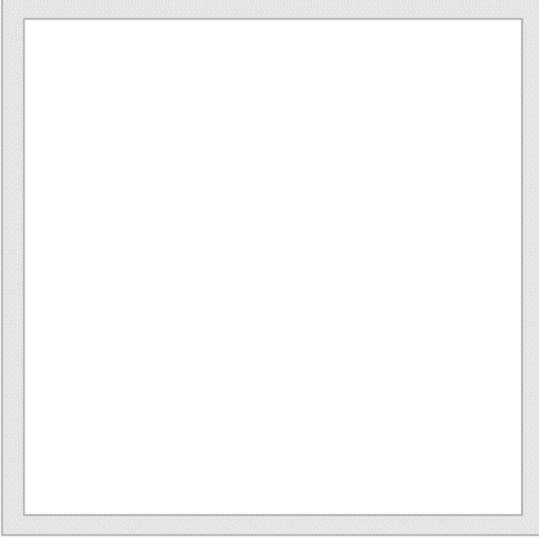
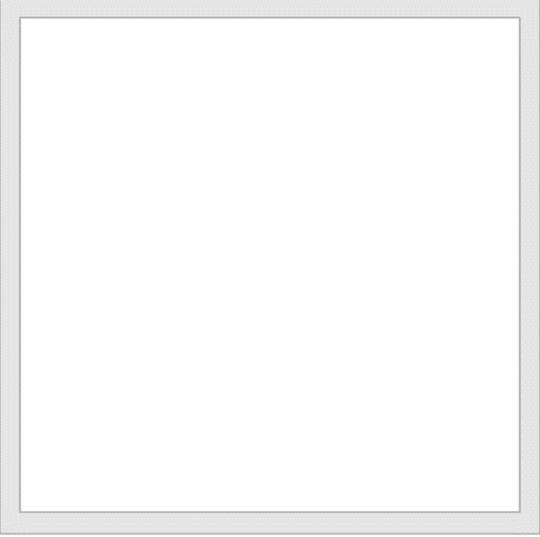
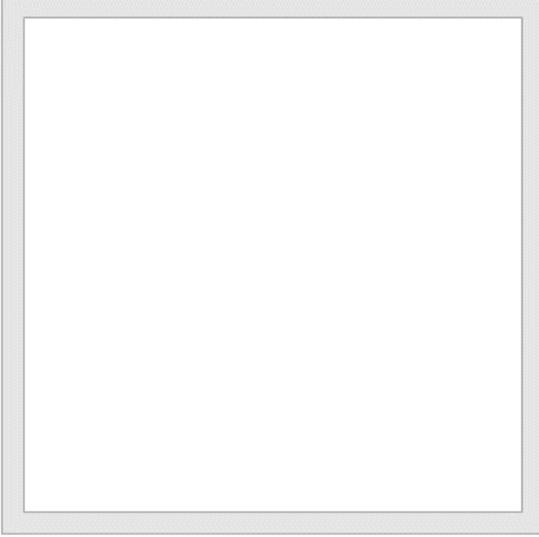
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5

6

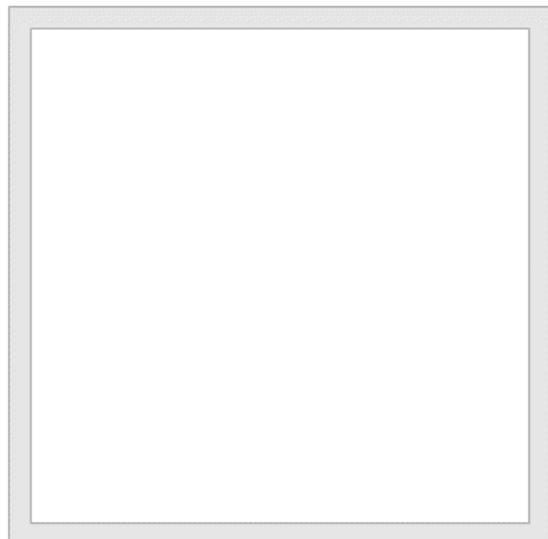
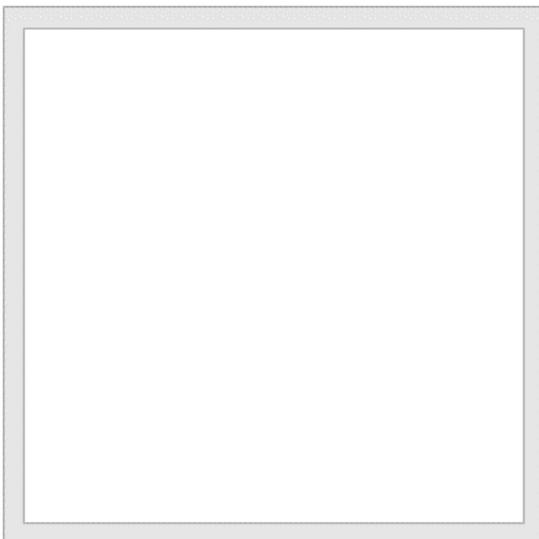
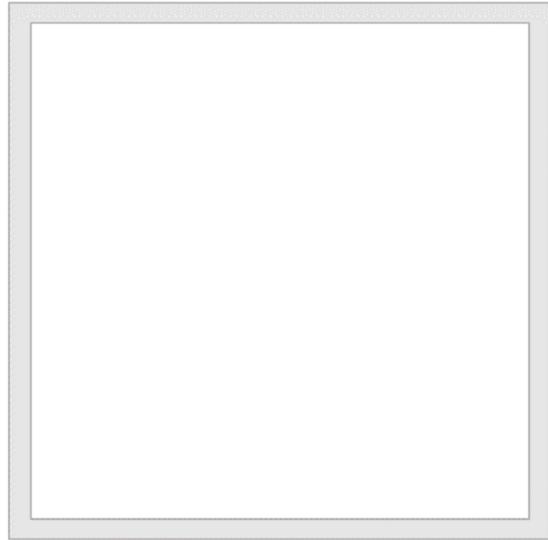
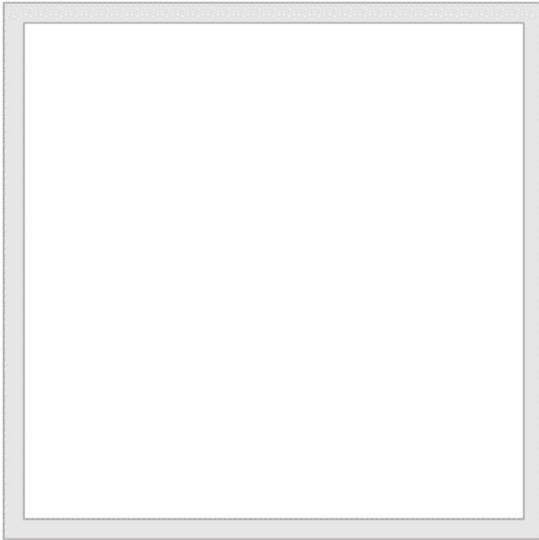
7

8

Wie viele  
Vierer  
passen in 36?

Wie viele  
Vierer  
passen in 40?

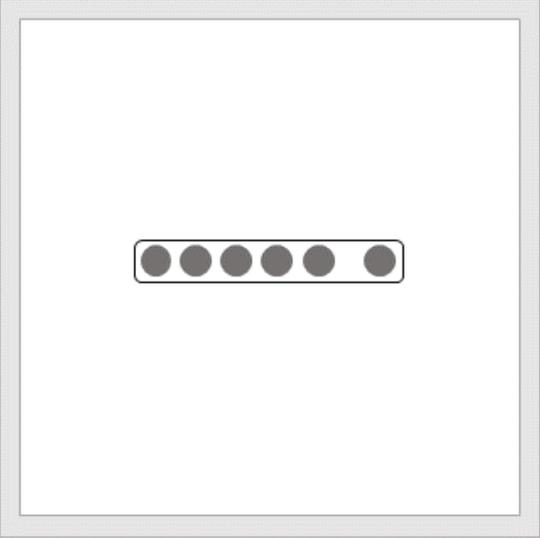
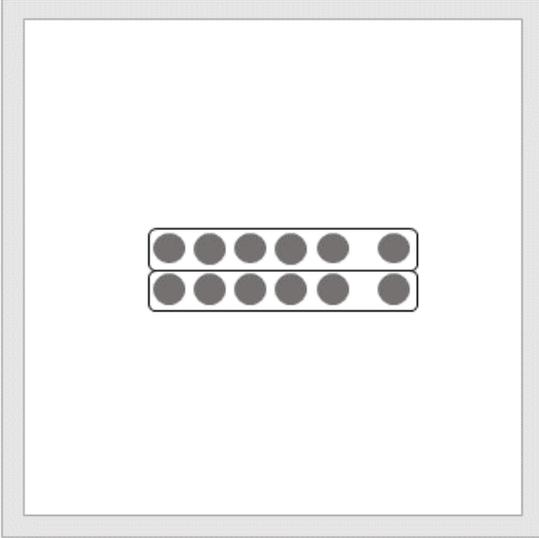
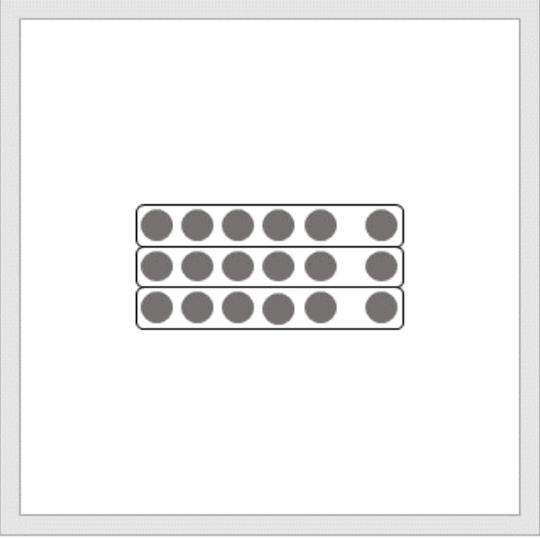
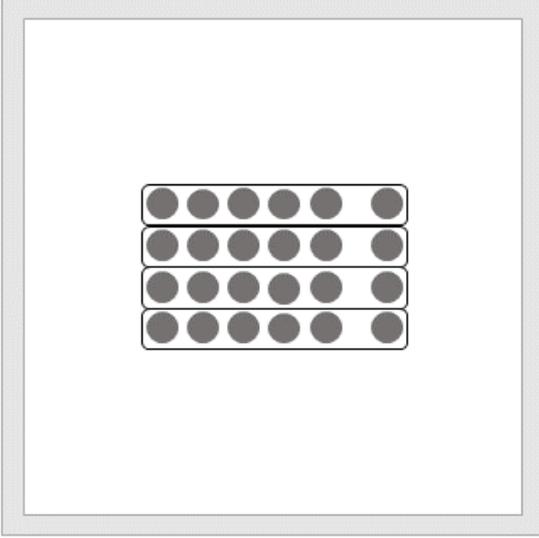
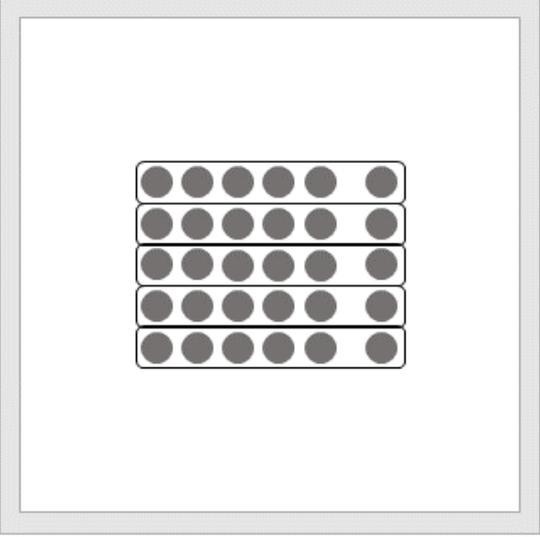
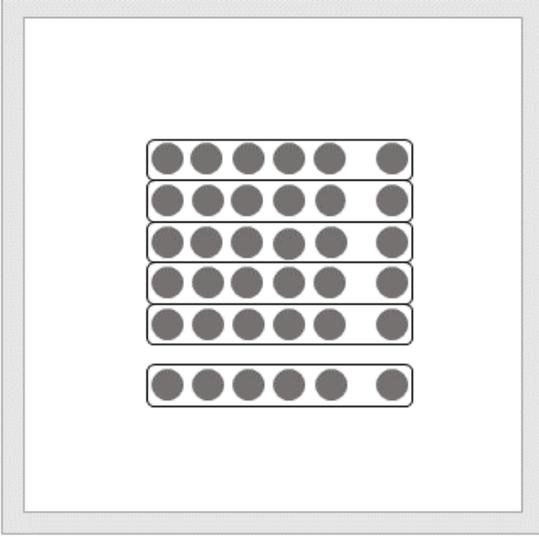


$$36 : 4$$

$$40 : 4$$

9

10

Wie viele  
Sechser  
passen in 6?

Wie viele  
Sechser  
passen in 12?

Wie viele  
Sechser  
passen in 18?

Wie viele  
Sechser  
passen in 24?

Wie viele  
Sechser  
passen in 30?

Wie viele  
Sechser  
passen in 36?

$$6 : 6$$

$$12 : 6$$

$$18 : 6$$

$$24 : 6$$

$$30 : 6$$

$$36 : 6$$

1

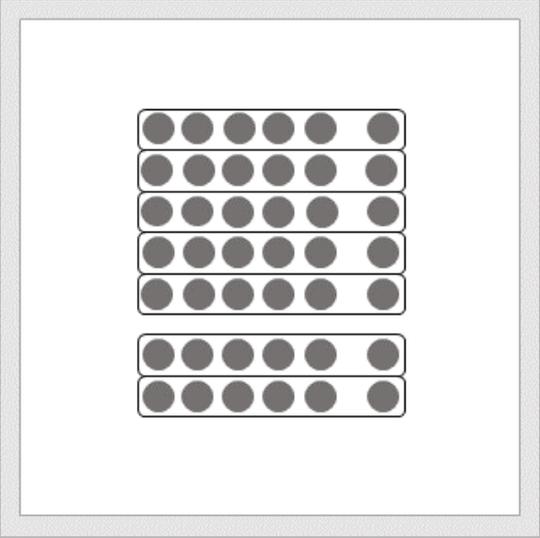
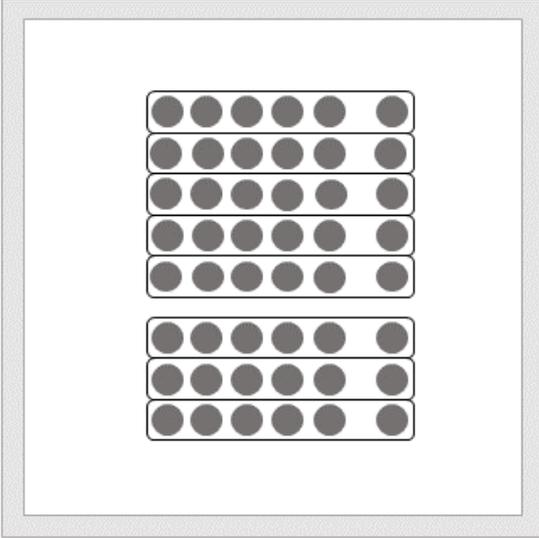
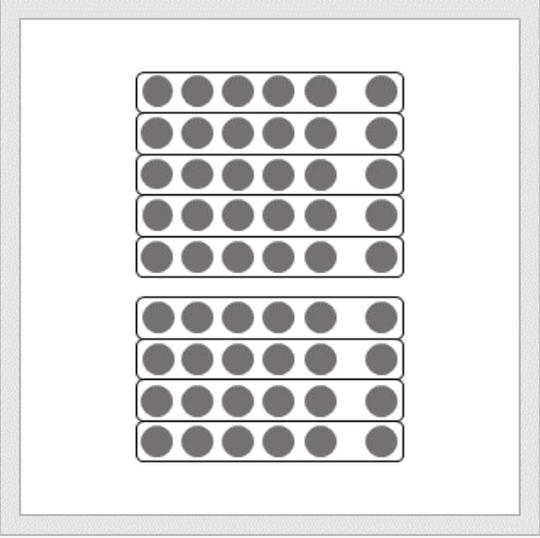
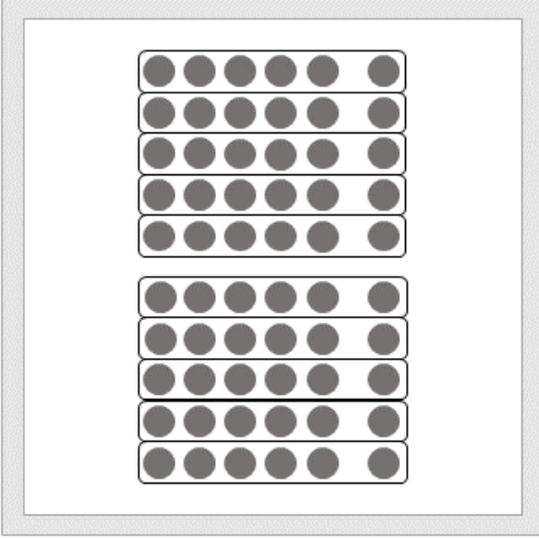
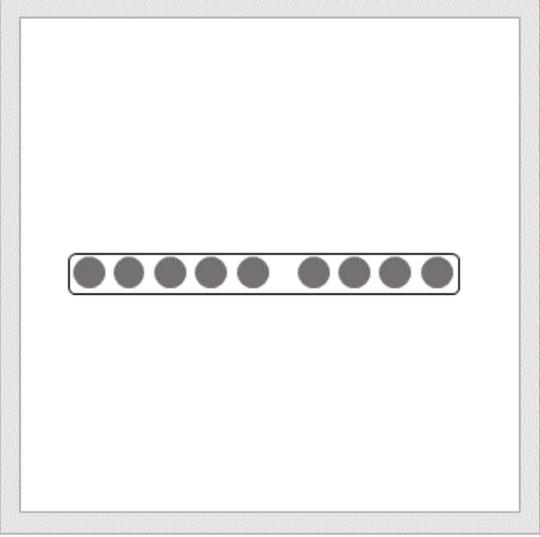
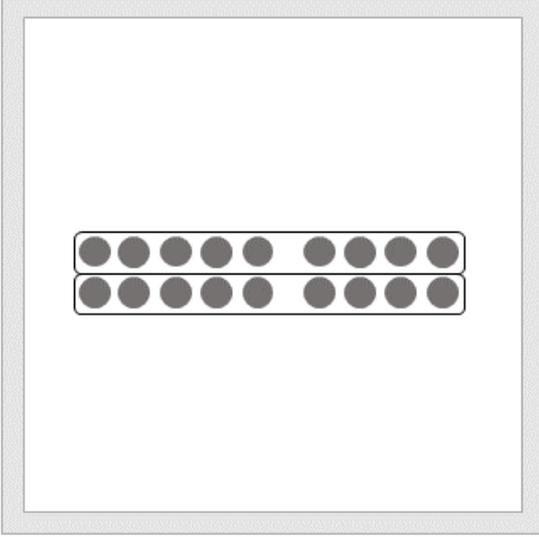
2

3

4

5

6

Wie viele  
Sechser  
passen in 42?

Wie viele  
Sechser  
passen in 48?

Wie viele  
Sechser  
passen in 54?

Wie viele  
Sechser  
passen in 60?

Wie viele  
Neuner  
passen in 9?

Wie viele  
Neuner  
passen in 18?

$$42 : 6$$

$$48 : 6$$

$$54 : 6$$

$$60 : 6$$

$$9 : 9$$

$$18 : 9$$

7

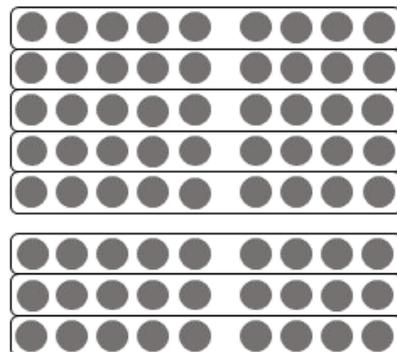
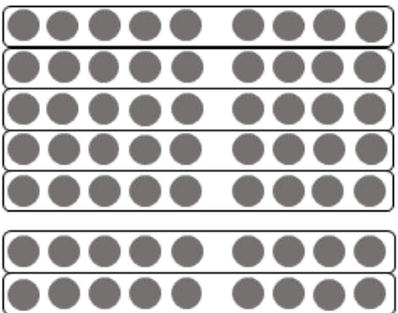
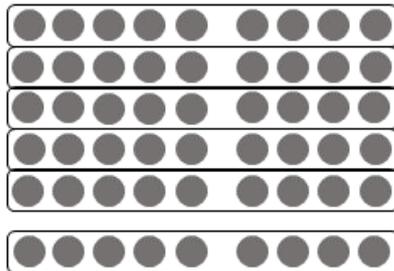
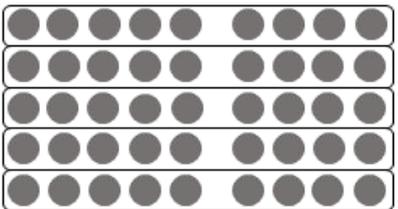
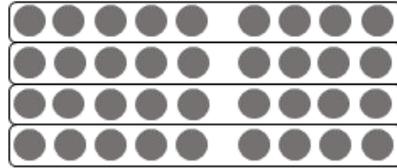
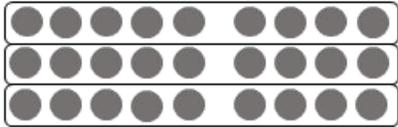
8

9

10

1

2



Wie viele  
Neuner  
passen in 27?

Wie viele  
Neuner  
passen in 36?

Wie viele  
Neuner  
passen in 45?

Wie viele  
Neuner  
passen in 54?

Wie viele  
Neuner  
passen in 63?

Wie viele  
Neuner  
passen in 72?

$$27 : 9$$

$$36 : 9$$

$$45 : 9$$

$$54 : 9$$

$$63 : 9$$

$$72 : 9$$

3

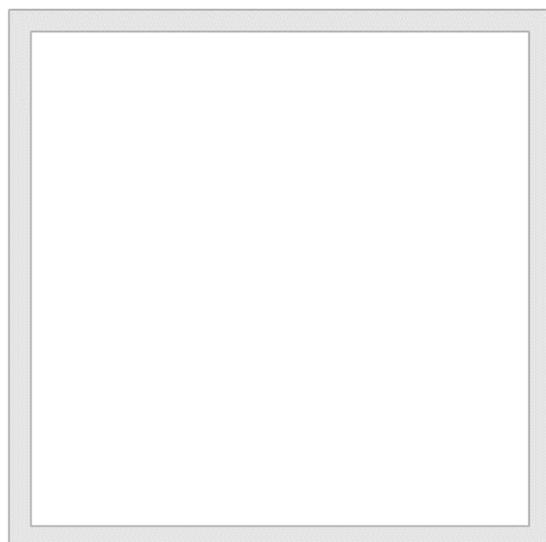
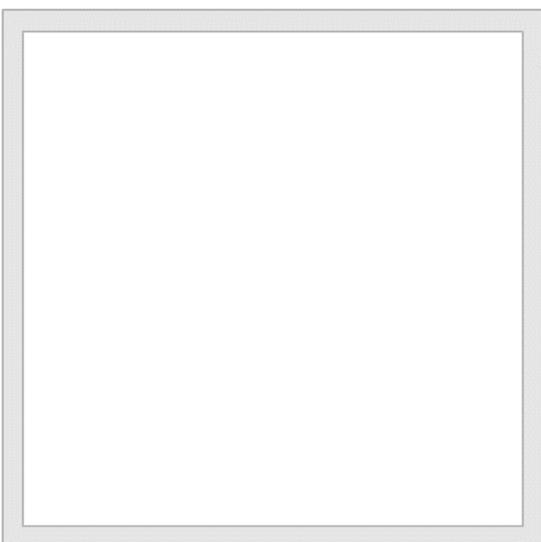
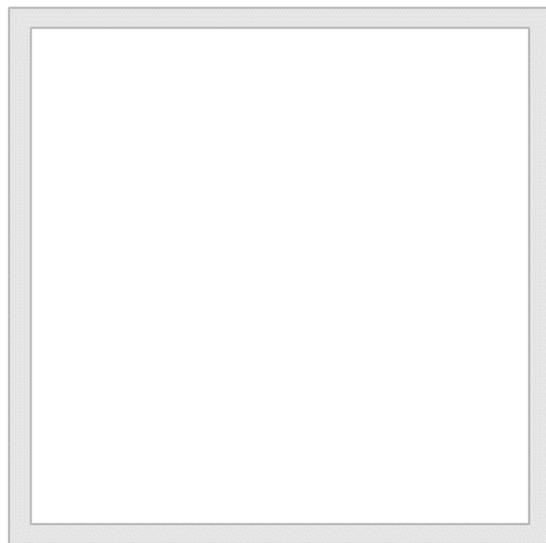
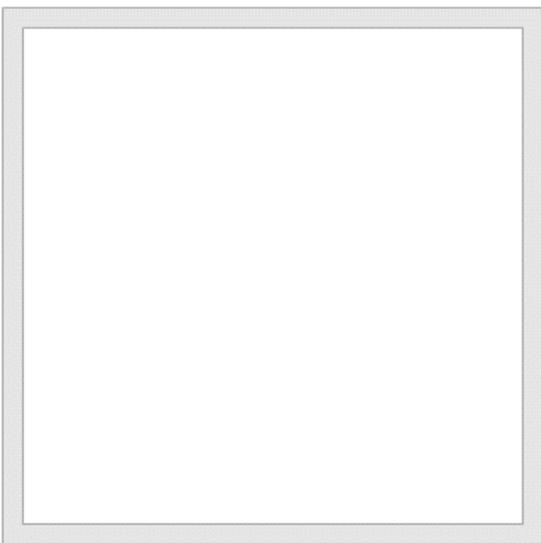
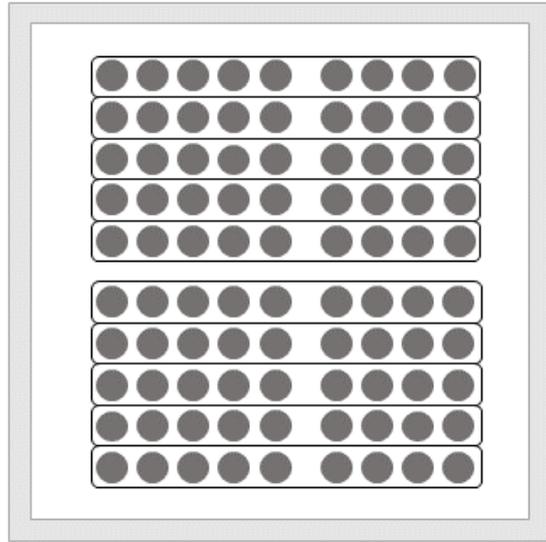
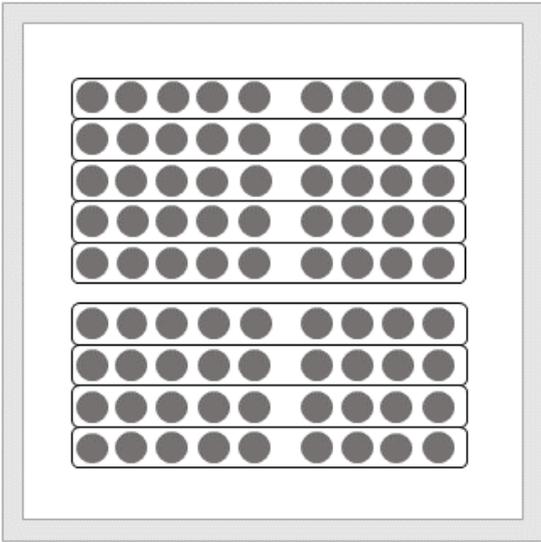
4

5

6

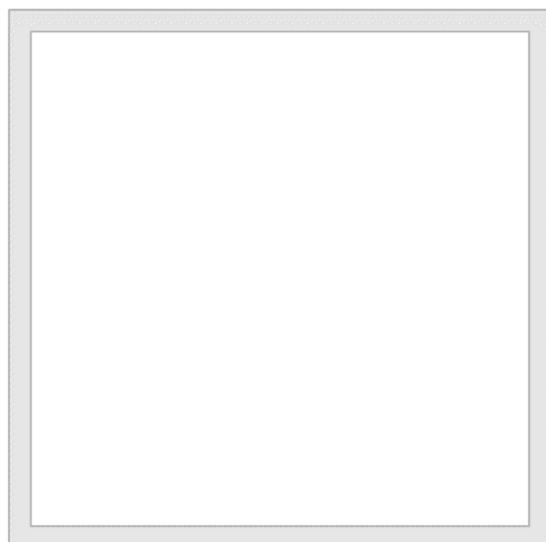
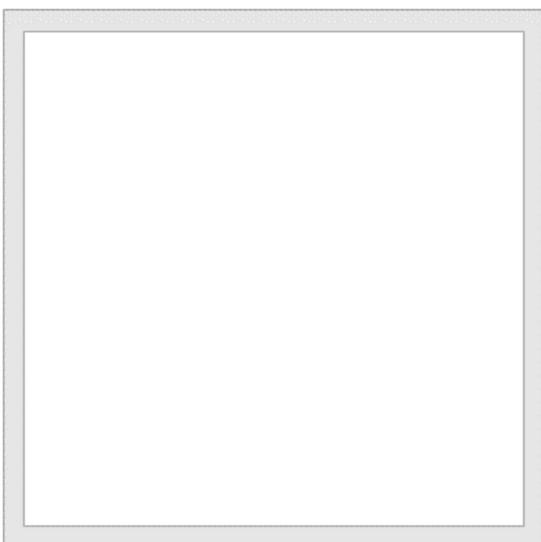
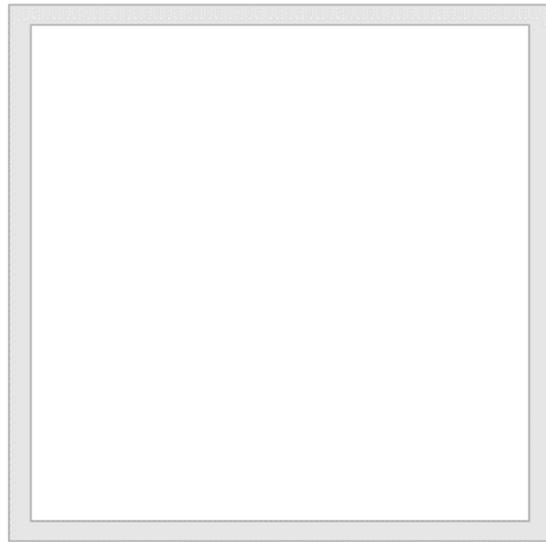
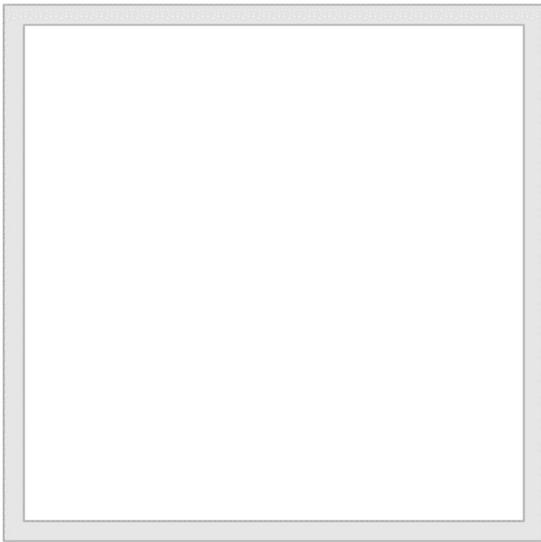
7

8



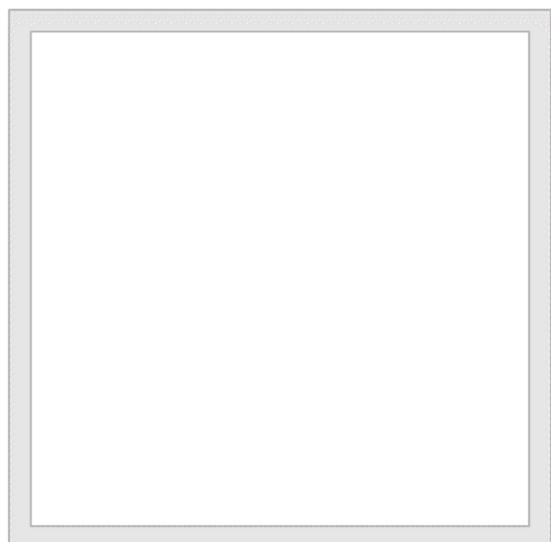
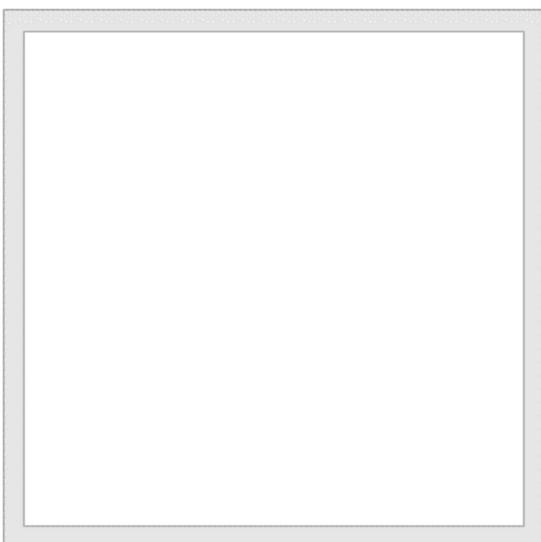
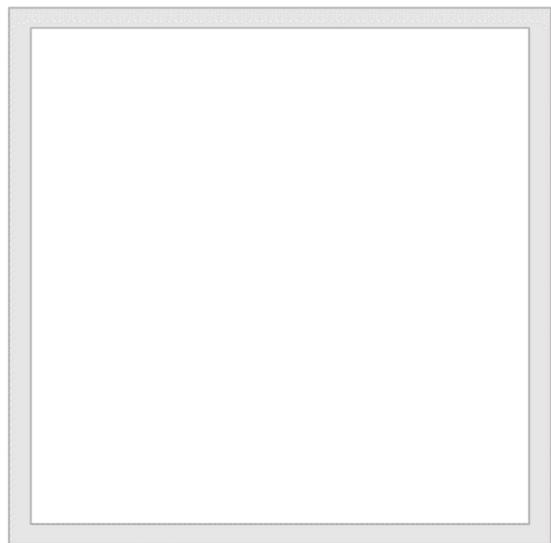
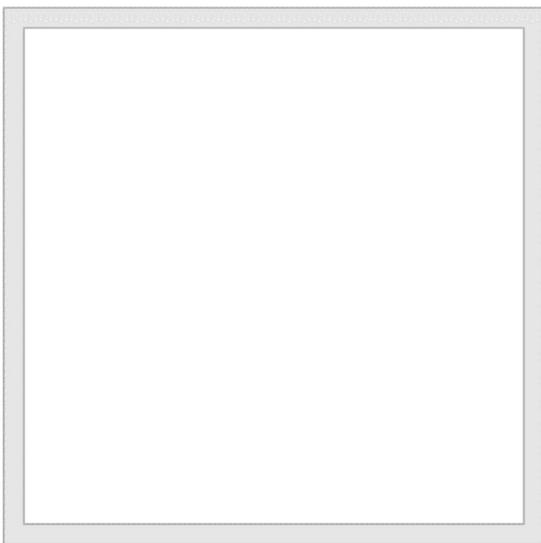
Wie viele  
Neuner  
passen in 81?

Wie viele  
Neuner  
passen in 90?



$$81 : 9$$

$$90 : 9$$



9

10

The image displays a 3x2 grid of six boxes, each containing a different arrangement of 24 small circles. Each circle is enclosed in a thin rectangular border. The boxes are arranged as follows:

- Top-left: A single horizontal row of 6 circles.
- Top-right: Two horizontal rows, each containing 6 circles.
- Middle-left: Three horizontal rows, each containing 6 circles.
- Middle-right: Four horizontal rows, each containing 6 circles.
- Bottom-left: Five horizontal rows, each containing 6 circles.
- Bottom-right: Six horizontal rows, each containing 6 circles.

Wie viele  
Siebener  
passen in 7?

Wie viele  
Siebener  
passen in 14?

Wie viele  
Siebener  
passen in 21?

Wie viele  
Siebener  
passen in 28?

Wie viele  
Siebener  
passen in 35?

Wie viele  
Siebener  
passen in 42?

$$7 : 7$$

$$14 : 7$$

$$21 : 7$$

$$28 : 7$$

$$35 : 7$$

$$42 : 7$$

1

2

3

4

5

6

The image shows a 3x2 grid of six boxes, each containing a different arrangement of 24 small circles. The circles are organized into rows and columns within each box, representing a mathematical division problem. The top row of boxes shows the initial state: two groups of 12 circles each, arranged in two rows of six. The middle row shows the process of dividing these into four groups of six circles each, arranged in two rows of three. The bottom row shows the final result: two groups of three circles each, arranged in two rows of one. This sequence illustrates the division of 24 by 4 to get 6.

Wie viele  
Siebener  
passen in 49?

Wie viele  
Siebener  
passen in 56?

Wie viele  
Siebener  
passen in 63?

Wie viele  
Siebener  
passen in 70?

Wie viele  
Achter  
passen in 8?

Wie viele  
Achter  
passen in 16?

$$49 : 7$$

$$56 : 7$$

$$63 : 7$$

$$70 : 7$$

$$8 : 8$$

$$16 : 8$$

7

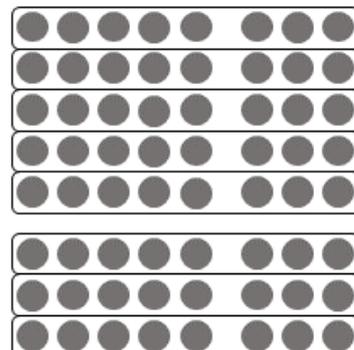
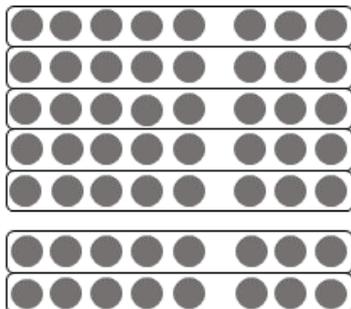
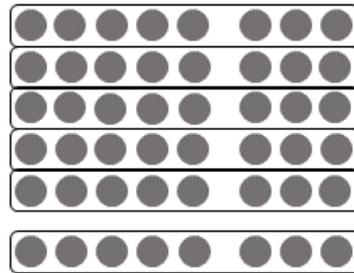
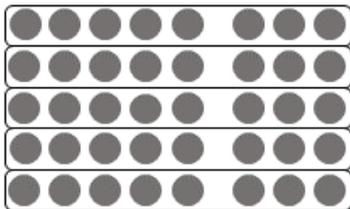
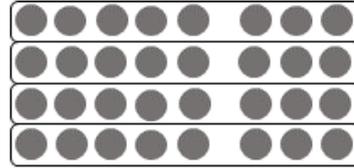
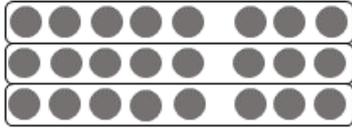
8

9

10

1

2



Wie viele  
Achter  
passen in 24?

Wie viele  
Achter  
passen in 32?

Wie viele  
Achter  
passen in 40?

Wie viele  
Achter  
passen in 48?

Wie viele  
Achter  
passen in 56?

Wie viele  
Achter  
passen in 64?

$$24 : 8$$

$$32 : 8$$

$$40 : 8$$

$$48 : 8$$

$$56 : 8$$

$$64 : 8$$

3

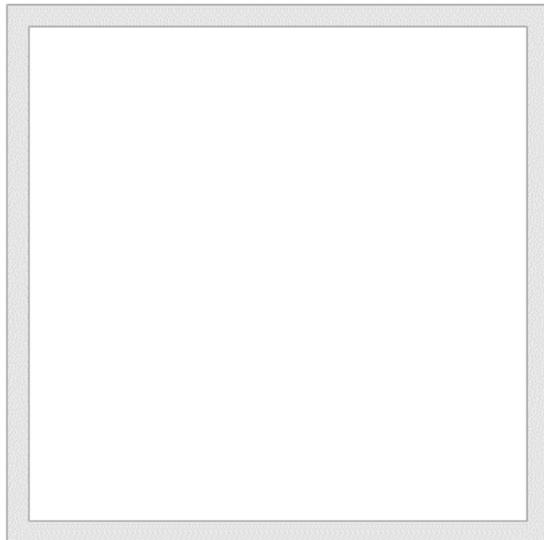
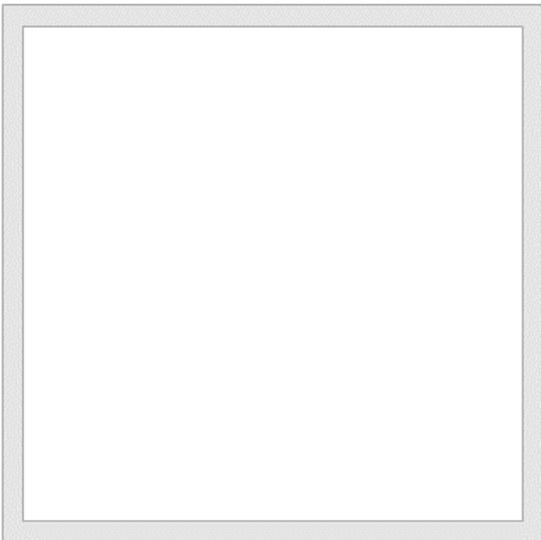
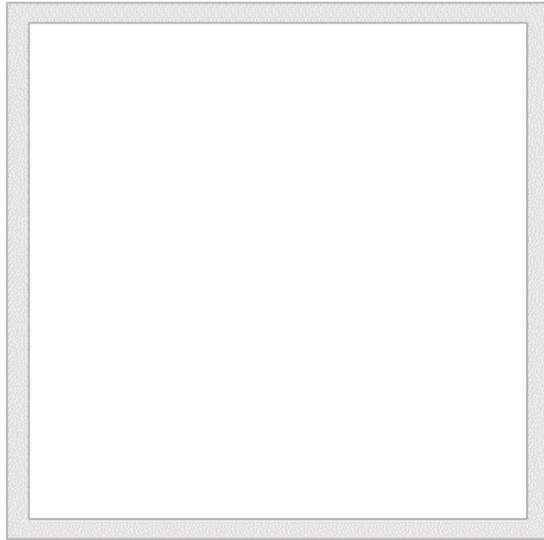
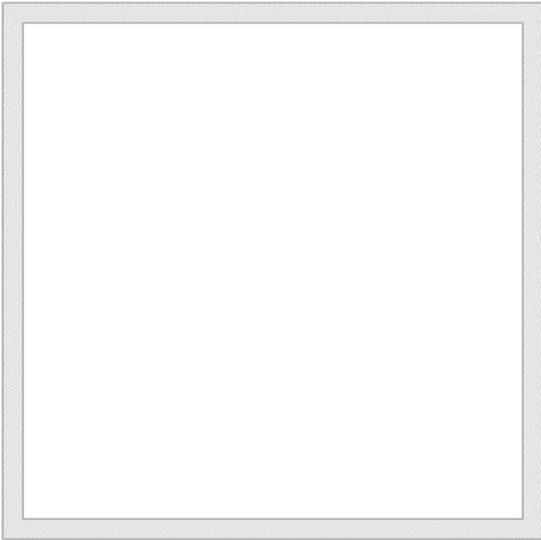
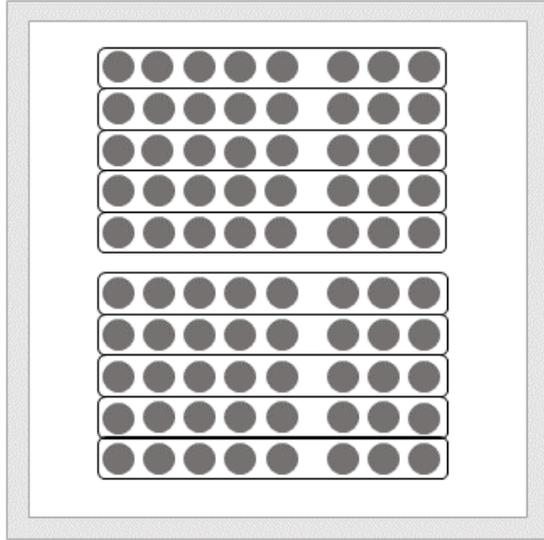
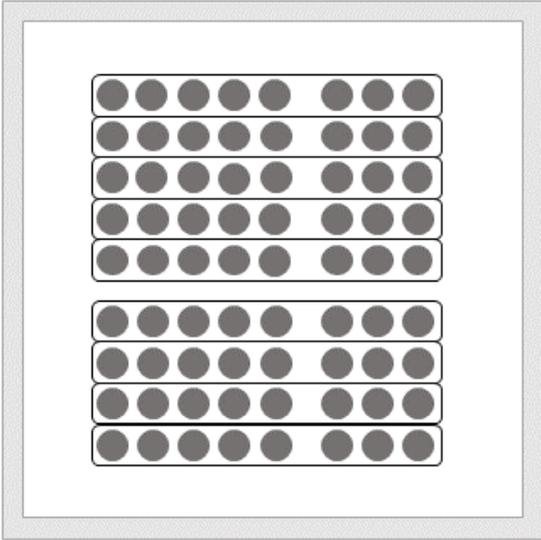
4

5

6

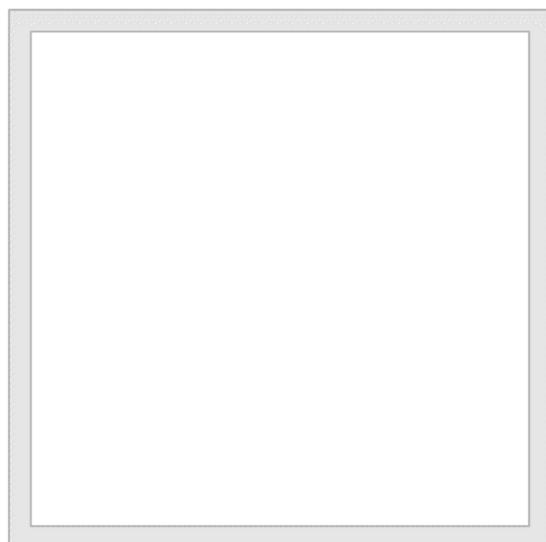
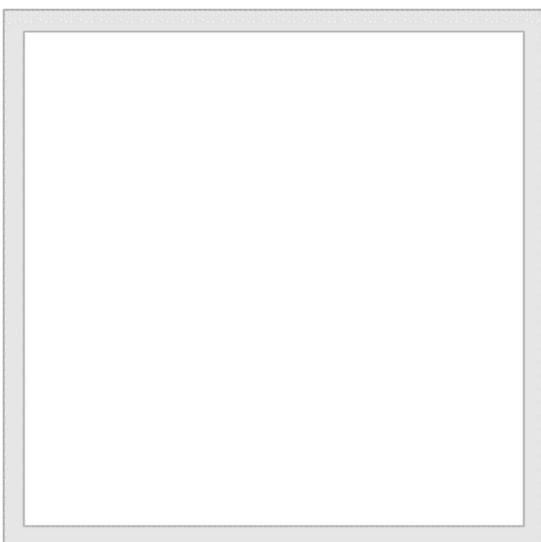
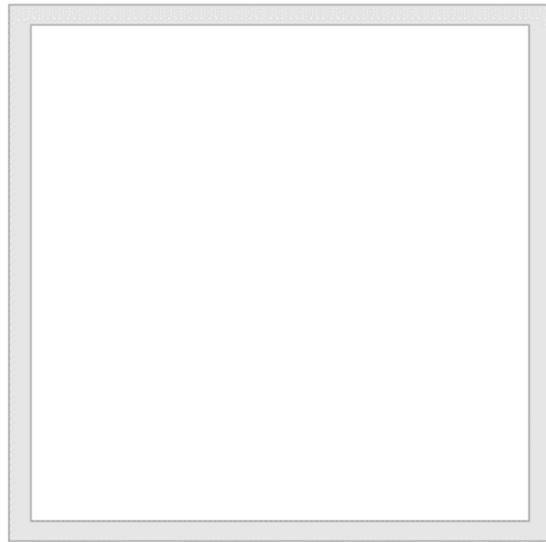
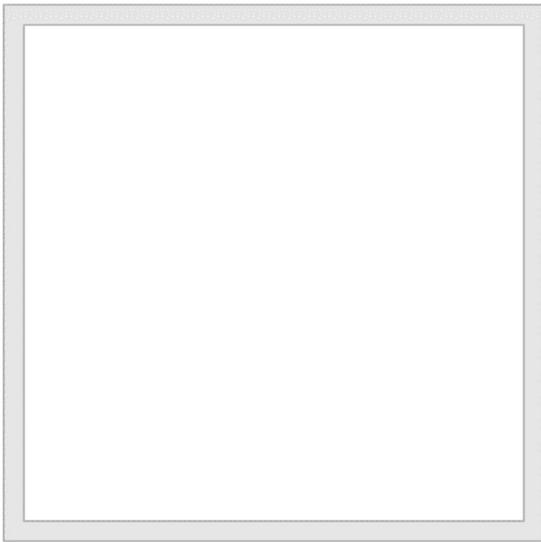
7

8



Wie viele  
Achter  
passen in 72?

Wie viele  
Achter  
passen in 80?



$$72 : 8$$

$$80 : 8$$

9

10