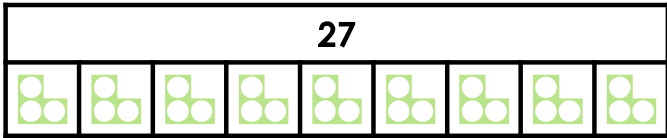


## Multiply and Divide by 9

1a. Write a multiplication and a division calculation based on the bar model.

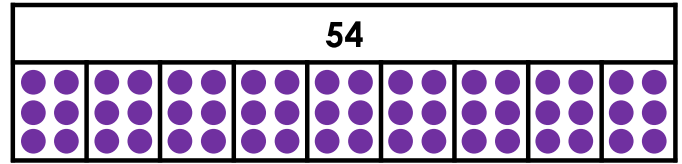


$$\square \div \square = \square \quad \square \times \square = \square$$



VF

1b. Write a multiplication and a division calculation based on the bar model.

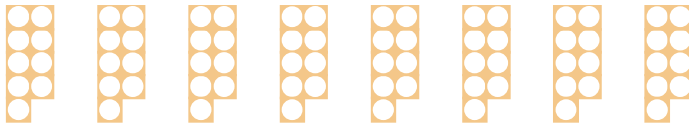


$$\square \div \square = \square \quad \square \times \square = \square$$



VF

2a. Using the image below, complete the number sentences.

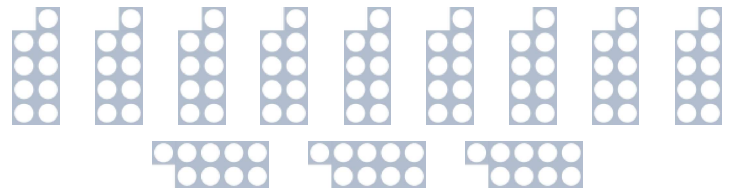


$$\begin{array}{l} 8 \times 9 = \square \quad 72 \div 9 = \square \\ 9 \times \square = \square \quad 72 \div 8 = \square \end{array}$$



VF

2b. Using the image below, complete the number sentences.

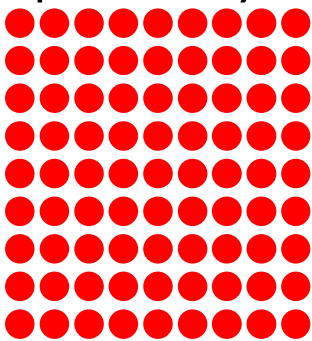


$$\begin{array}{l} 12 \times 9 = \square \quad 108 \div 9 = \square \\ 9 \times \square = \square \quad 108 \div 12 = \square \end{array}$$



VF

3a. Circle the number sentences that are represented by the array.

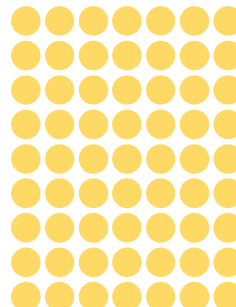


$$\begin{array}{l} 81 = 9 \times 9 \\ 9 \times 8 = 72 \\ 81 \div 9 = 9 \\ 72 \div 8 = 9 \end{array}$$



VF

3b. Circle the number sentences that are represented by the array.



$$\begin{array}{l} 63 \div 7 = 9 \\ 9 = 54 \div 6 \\ 7 \times 9 = 63 \\ 63 \div 9 = 7 \end{array}$$



VF

4a. Complete the number sentences using the image below.

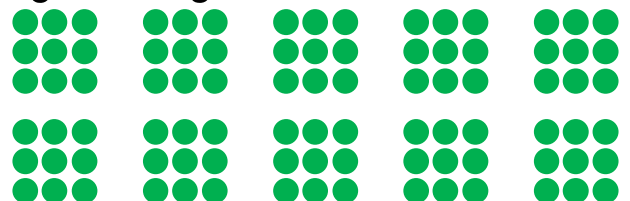


$$\begin{array}{l} \square \times \square = \square \\ \square \div \square = \square \end{array}$$



VF

4b. Complete the number sentences using the image below.



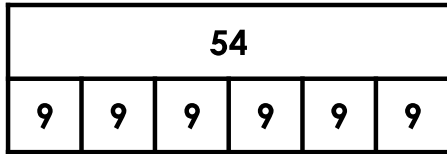
$$\begin{array}{l} \square \times \square = \square \\ \square \div \square = \square \end{array}$$



VF

## Multiply and Divide by 9

5a. Write a multiplication and a division calculation based on the bar model.



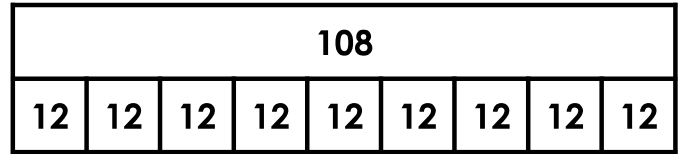
$$\square \div \square = \square \quad \square \times \square = \square$$



VF

## Multiply and Divide by 9

5b. Write a multiplication and a division calculation based on the bar model.

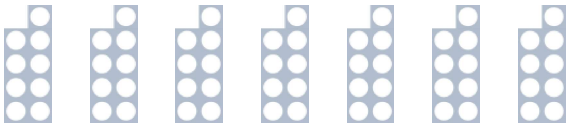


$$\square \div \square = \square \quad \square \times \square = \square$$



VF

6a. Using the image below, complete the number sentences.



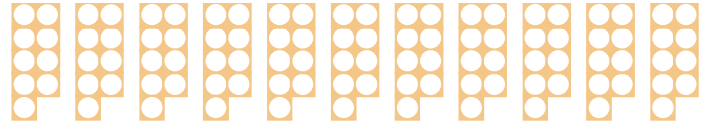
$$63 \div \square = \square \quad \square \times 9 = \square$$

$$\square \div 9 = \square \quad \square \times \square = 63$$



VF

6b. Using the image below, complete the number sentences.



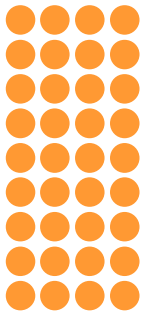
$$99 \div \square = \square \quad \square \times 9 = \square$$

$$\square \div 9 = \square \quad \square \times \square = 99$$



VF

7a. Circle the number sentences that are represented by the array.



$$36 = 4 \times 9$$

$$9 \times 4 = 36$$

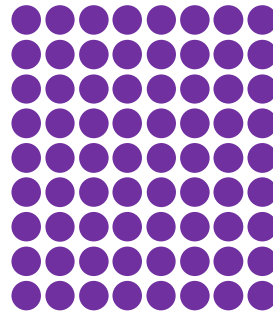
$$4 = 36 \div 9$$

$$36 \div 12 = 3$$



VF

7b. Circle the number sentences that are represented by the array.



$$81 \div 9 = 9$$

$$72 = 8 \times 9$$

$$9 \times 9 = 81$$

$$72 \div 9 = 8$$



VF

8a. Use the sentences to complete the calculations.

There are 5 lots of 9.

$$\square \times \square = \square$$

There are 11 nines.

$$\square \times \square = \square$$



VF

8b. Use the sentences to complete the calculations.

There are 9 lots of 9.

$$\square \times \square = \square$$

There are twelve nines.

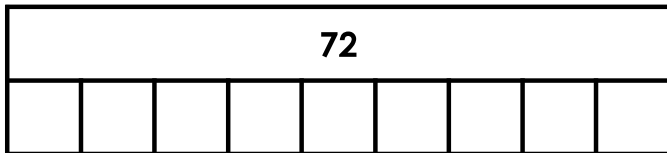
$$\square \times \square = \square$$



VF

## Multiply and Divide by 9

9a. Complete the bar model.



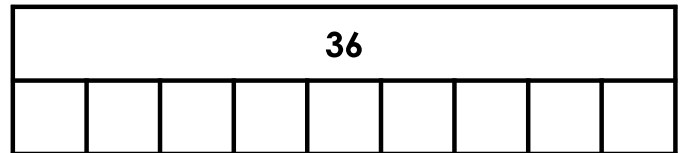
Now write a multiplication and division calculation based on the bar model.



VF

## Multiply and Divide by 9

9b. Complete the bar model.



Now write a multiplication and division calculation based on the bar model.



VF

10a. Using the first calculation, complete the number sentences below.

$$11 \times 9 = \underline{\quad}$$

$$9 \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$



VF

10b. Using the first calculation, complete the number sentences below.

$$12 \times 9 = \underline{\quad}$$

$$9 \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$



VF

11a. Circle the related number sentences.

$$81 = 9 \times 9 \qquad 54 \div 9 = 6$$

$$9 \times 4 = 36 \qquad 81 \div 9 = 9$$

Draw one array to represent them.



VF

11b. Circle the related number sentences.

$$5 \times 9 = 45 \qquad 9 = 27 \div 3$$

$$27 = 9 \times 3 \qquad 27 \div 9 = 3$$

Draw one array to represent them.



VF

12a. Write and solve the calculation for each of the sentences.

There are eleven lots of nine.

There are 10 nines.



VF

12b. Write and solve the calculation for each of the sentences.

There are six nines.

There are two lots of nine.



VF