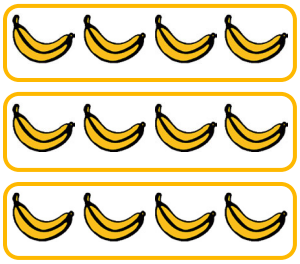
Multiplication and Division Fact Families

Below, 12 bananas are arranged in an array. We can actually get **two** multiplication facts AND **two** division facts from the picture.

Bananas divided into rows:

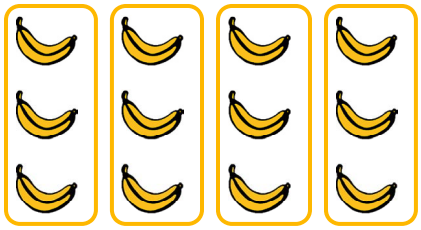


12 bananas in groups of four is three groups.

12 ÷ 4 = 3

3 × 4 = 12

The same bananas divided into columns:



12 bananas in groups of three is four groups.

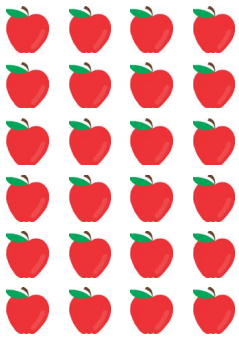
12 ÷ 3 = 4

4 × 3 = 12

Just like with addition and subtraction, we can form **fact families** that have two multiplication facts and two division facts.

1. Make two division sentences and two multiplication sentences to match each array. Think of dividing the objects either into rows or into columns.

a.



4 × 6 = _____

6 × 4 = _____

_____ ÷ 4 = _____

_____ ÷ 6 = _____

b.

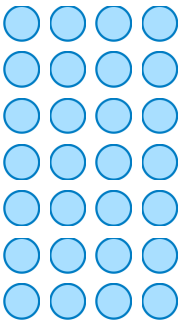
_____ × _____ = _____

_____ × _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____

c.



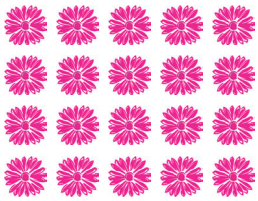
_____ × _____ = _____

_____ × _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____

d.



_____ × _____ = _____

_____ × _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____

2. Write a fact family to match the array.

_____ × _____ = _____

_____ × _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____

3. Write a fact family, and draw an array to illustrate it.

_____ × _____ = _____

_____ × _____ = _____

18 ÷ _____ = 3

_____ ÷ _____ = _____

4. Fill in the missing numbers to complete each fact family.

a.	**b.**	**c.**
7 × _____ = 35	_____ × _____ = _____	12 × 4 = _____
_____ × _____ = _____	_____ × _____ = _____	_____ × _____ = _____
_____ ÷ _____ = _____	_____ ÷ 8 = 9	_____ ÷ _____ = _____
_____ ÷ _____ = _____	_____ ÷ _____ = _____	_____ ÷ _____ = _____

5. Joanna arranged 28 toy blocks in an array, in four columns. How many rows does her array have?

6. Alice drew a picture of trees in an orchard. She had three rows of trees, with five trees in each row. She also drew three mangos in each tree.

   Explain what information you can find out about this situation. Calculate to find it.

7. A meeting hall had 45 chairs arranged in five rows. What information can you find out about this situation? Calculate to find it.