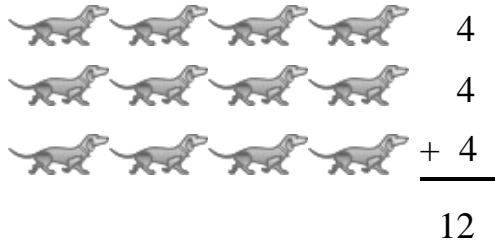


Multiplication as an array

Dogs are neatly arranged in rows and columns

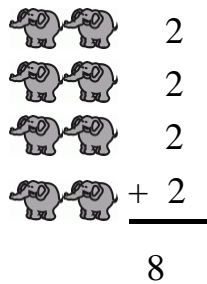


There are **three** rows,
and each row has **four** dogs.

We have $4 + 4 + 4$ dogs,
or 3 times 4 dogs.

$$3 \times 4 = 4 + 4 + 4 = 12$$

Elephants are neatly arranged in rows and columns

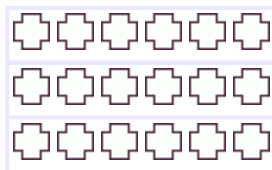


There are **four** rows, and each row has
two elephants.

We have $2 + 2 + 2 + 2$ elephants,
or 4 times 2 elephants.

$$4 \times 2 = 2 + 2 + 2 + 2 = 8$$

When objects are in an array, the rows are like groups. It still pictures multiplication as
REPEATED ADDITION.



3 rows, 6 crosses in each.

$$3 \times 6 = 6 + 6 + 6 = 18$$



4 rows, 8 camels in each.

$$4 \times 8 = 8 + 8 + 8 + 8 = 32$$