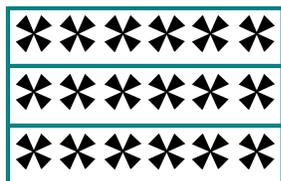


Multiplication as an Array

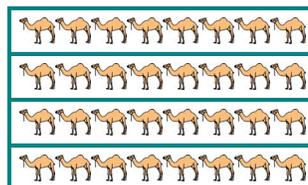
An **array** is an orderly arrangement of things in rows and columns. When things are neatly aligned in an array, we can think of the *rows as groups*, so an array still pictures multiplication as repeated addition.



3 rows, 6 crosses in each row.

$$6 + 6 + 6$$

$$3 \times 6 = 18$$

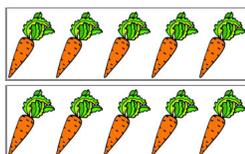


4 rows, 8 camels in each row.

$$8 + 8 + 8 + 8$$

$$4 \times 8 = 32$$

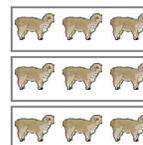
1. Fill in the missing numbers.



a. _____ rows, _____ carrots in each row.

$$\underline{\quad} + \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad} \text{ carrots}$$



b. _____ rows, _____ rams in each row.

$$\underline{\quad} + \underline{\quad} + \underline{\quad}$$

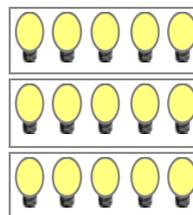
$$\underline{\quad} \times \underline{\quad} = \underline{\quad} \text{ rams}$$



c. _____ rows, _____ bear in each row.

$$\underline{\quad} + \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad} \text{ bears}$$



d. _____ rows, _____ bulbs in each row.

$$\underline{\quad} + \underline{\quad} + \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad} \text{ bulbs}$$