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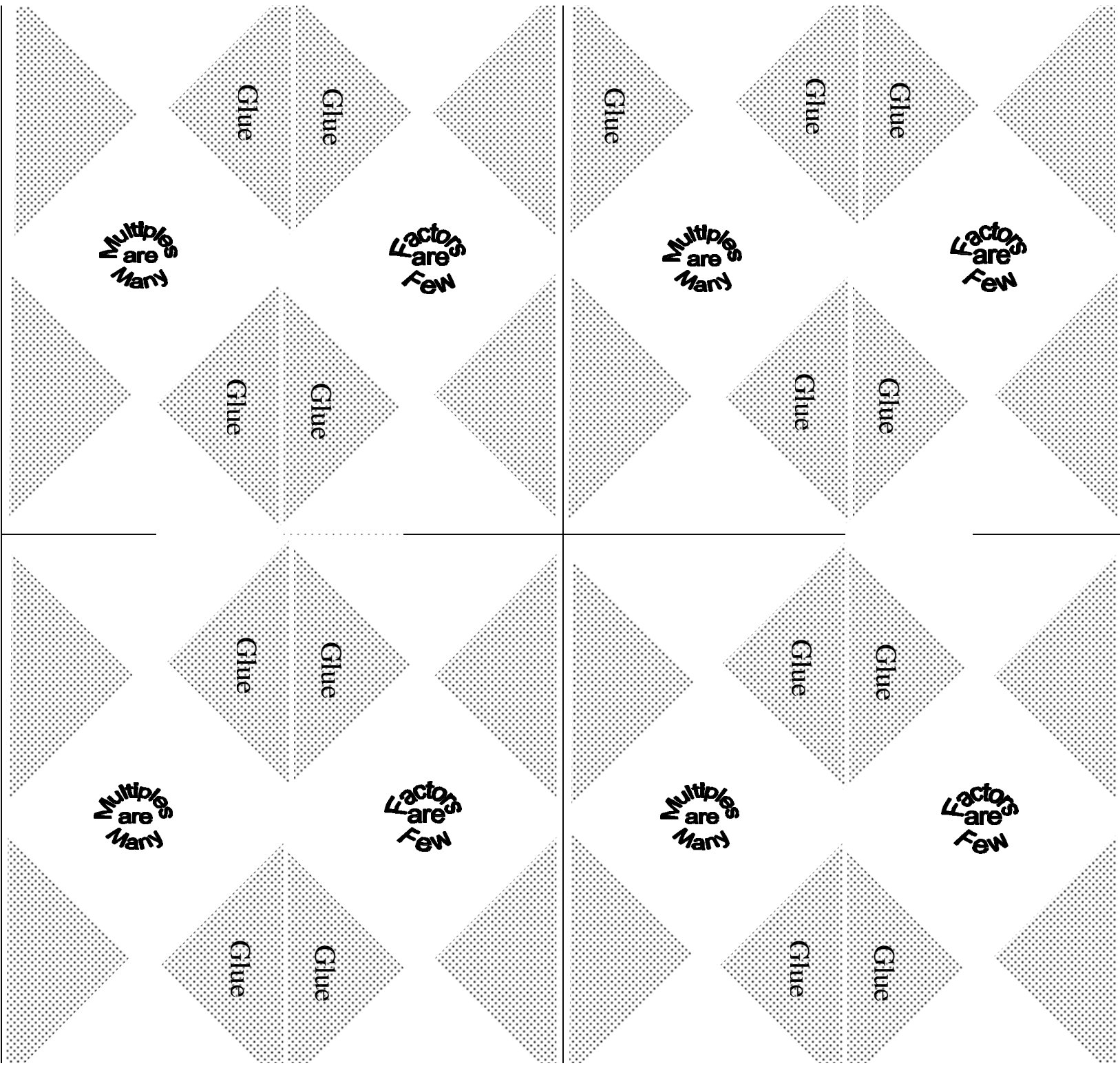


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Multiples
are
Many

Factors
are
Few

Multiples
are
Many

Factors
are
Few

Multiples
are
Many

Factors
are
Few

Multiples
are
Many

Factors
are
Few

The **Greatest Common Factor** (GCF) of two numbers is the **largest factor** that the two numbers **share**.

Example: Find the GCF of 16 and 20

Factors of 16: 1, 2, 4, 8, 16

Factors of 20: 1, 2, 4, 5, 10, 20

Common Factors of 16 and 20: 1, 2, 4

GCF of 16 and 20: 4

One last thing... here's something we like to say to remember the difference between factors and multiples:



The **common factors** of two numbers are **all** of the numbers that are factors of **both** numbers.

Example: Find the common factors of 12 and 36

Factors of 12: 1, 2, 3, 4, 6, 12

Factors of 36: 1, 2, 3, 4, 6, 9, 12, 18, 36

Common factors of 12 and 36: 1, 2, 3, 4, 6, 12

The **factors** of a number are all of the counting numbers that will divide evenly into the number.

Examples:

Factors of 6: 1, 2, 3, 6

Factors of 9: 1, 3, 9



Hold on—I don't see any dots!

It's because a number is evenly divisible by only a few other numbers.



The **common multiples** of two numbers are **all** of the multiples that the two numbers **share**.

Example: Find the common multiples of 4 and 6

Multiples of 4: 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, ...

Multiples of 6: 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, ...

Common multiples of 4 and 6: 12, 24, 36, 48, 60, ...

The **Least Common Multiple** (LCM) of two numbers is the **smallest multiple** that the two numbers **share**.

Example: Find the LCM of 15 and 10

Multiples of 15: 15, 30, 45, 60, 75, 90, ...

Multiples of 10: 10, 20, 30, 40, 50, 60, 70, 80, 90, ...

Common multiples of 15 and 10: 30, 60, 90, ...

LCM of 15 and 10: 30

To find the **multiples** of a number, multiply the number by the counting numbers (1, 2, 3, 4, ...).

Examples:

Multiples of 3: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ...

Multiples of 8: 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, ...

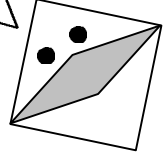


What do the three dots mean?



It means that the multiples are infinite.

We're going to show you how to work with multiples, factors, common multiples, common factors, LCM and GCF.



Welcome to the wonderful world of multiples and factors!!!

