

IDENTIFYING FACTORS

September 24th, 2030

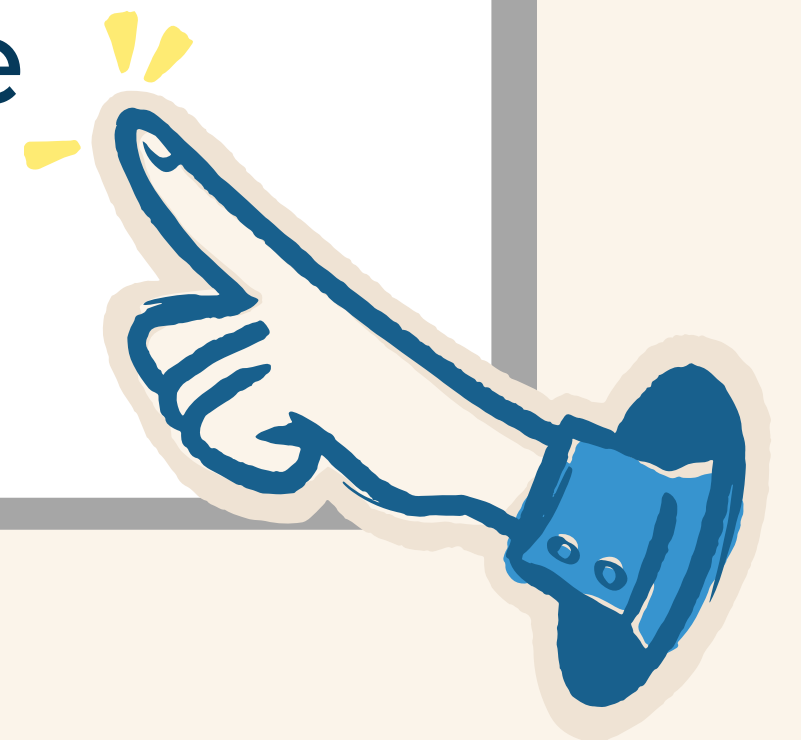




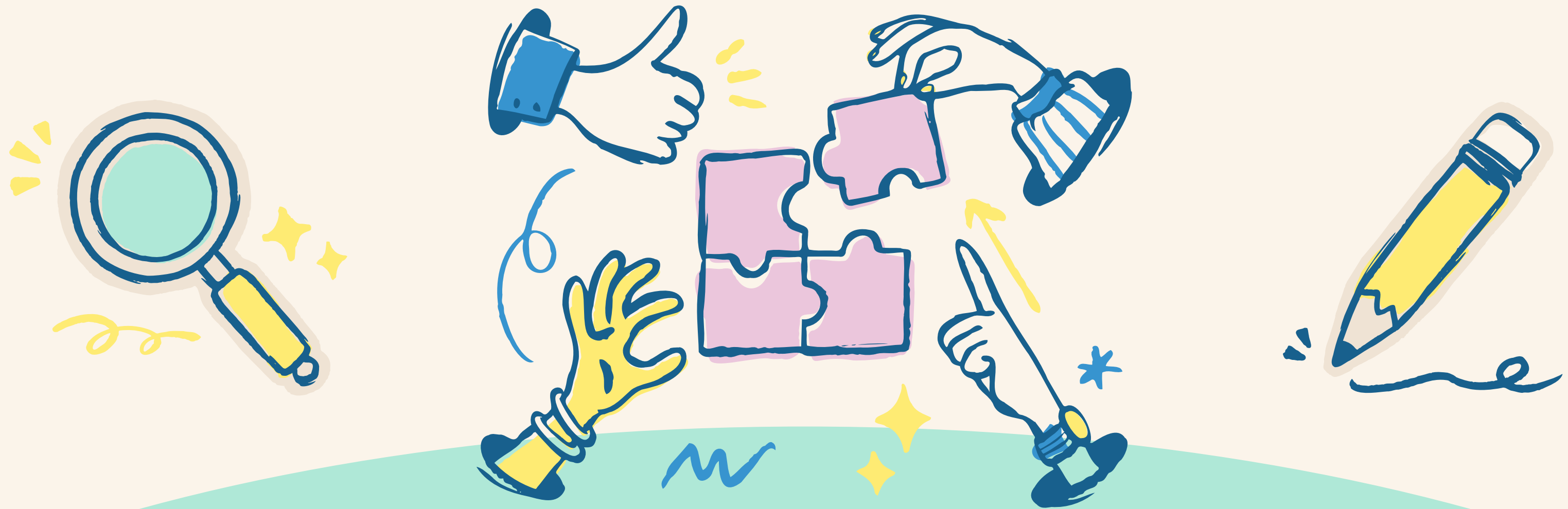
WHAT IS A FACTOR?

Factors are numbers we can multiply together to get another number.

A number is a factor if it can divide evenly into the other number.



LET'S SEE SOME EXAMPLES!



WHAT ARE THE FACTORS OF 6?

$$1 \times 6 = 6$$

$$2 \times 3 = 6$$

So, the factors of 6
are 1, 2, 3, and 6.



Think about all the
whole numbers you
can multiply to get 6.



WHAT ARE THE FACTORS OF 12?

Remember:
A factor of a number
divides the number
evenly, with no
remainder.

$$1 \times 12 = 12$$

$$3 \times 4 = 12$$

$$2 \times 6 = 12$$

Can we multiply
something by 5 to
get 12?

6 was already used!
So we are done.

So, the factors of 12 are
1, 2, 3, 4, 6, and 12.

WHAT ARE THE FACTORS OF 16?

$$1 \times 16 = 16$$

$$2 \times 8 = 16$$

$$4 \times 4 = 12$$

Can we multiply something
by 3 to get 16?

4 was used twice,
so that means we
stop there!

So, the factors of 16 are
1, 2, 4, 8, and 16.



Ask yourself:
“Can I multiply this
number and something
else to get 16?”

HOW DO I FIND ALL THE FACTORS OF 24?

Start with 1.

You can multiply 1×24 . So, 1 and 24 are both factors of 24.

Put 1 at the beginning of your factor list and 24 at the end.



1

24

HOW DO I FIND ALL THE FACTORS OF 24?

Now try 2.

You can multiply 2×12 to get 24. So, 2 and 12 are both factors of 24.

Add them to our list.

1

2

12

24



HOW DO I FIND ALL THE FACTORS OF 24?

Now try 3.

You can multiply 3×8 to get 24. So, 3 and 4 are both factors of 24.

Add them to our list.



1 2 3 8 12 24

HOW DO I FIND ALL THE FACTORS OF 24?

Now try 4.

You can multiply 4×6 to get 24. So, 4 and 6 are both factors of 24.

Add them to our list.



1 2 3 4 6 8 12 24

HOW DO I FIND ALL THE FACTORS OF 24?

Now try 5.

We can't divide 24 by 5 evenly, so it is not a factor of 24. Let's move on to 6.

6 is already on our list, so that means our list is complete!



1 2 3 4 6 8 12 24

HOW DO I FIND ALL THE FACTORS OF 24?



The factors of 24 are
1, 2, 3, 4, 6, 8, 12, and 24



Level
1/9

Score
0

Streak
0

0%

Find all factors of:

20

Found: 0 / 6

29

39

8

31

14

5

4

2

46

43

20

48

10

41

13

1

Show me a factor

Restart

Next Challenge →



Factor Detective

Click on all the factors
of the target number