



Multiplying by 1

Discover the Identity Property!



Here's what you'll achieve:

- Master the 1 times table
- Discover the identity property's secrets
- Tackle tricky problems with the identity property

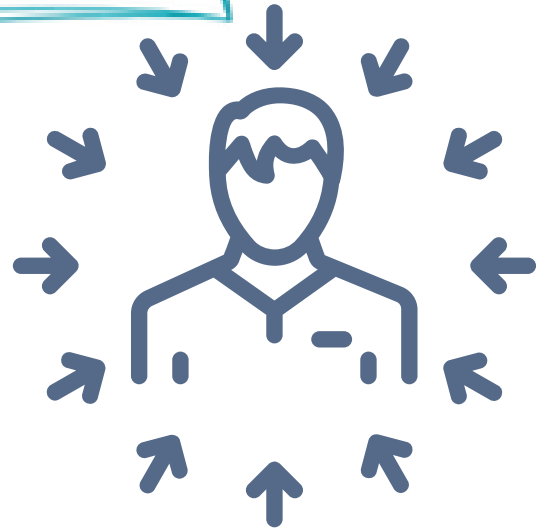
IDENTITY PRINCIPLE

(I-DEN-TI-TY)

Your identity is who you are.

It doesn't matter how many people you know, or how many friends you have.

You are still the only you in the world.



The Identity principle means that any number multiplied by 1 equals the number you started with.

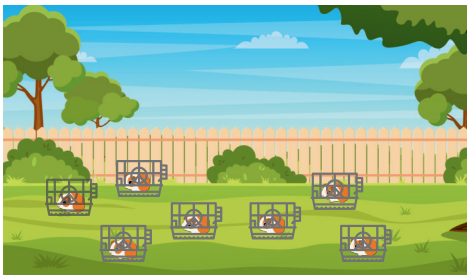
And the commutative property still applies.



$$1 \times 4 = 4$$

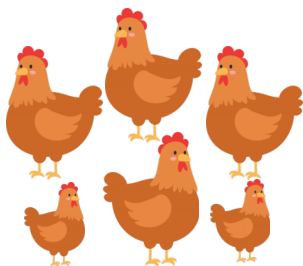


$$4 \times 1 = 4$$



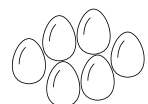
There are 7 cages in the backyard, and each cage has 1 guinea pig in it.
How many guinea pigs are in the backyard?

$$7 \times 1 = 7$$

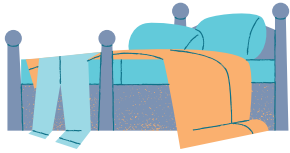


We have six chickens. Each chicken laid 1 egg.
How many eggs can we collect from the chicken coop?

$$6 \times 1 = 6$$



IDENTITY PROPERTY



On Monday, Mum said she will give you \$2 for each day you make your bed.

You made your bed on Tuesday, but have not done it since.

How much pocket money have you earned?

Because Tuesday is one day, the maths looks like this.

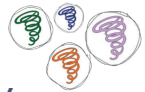
$$1 \times 2 = 2$$



Unleash Your Inner Genius with Multisensory Activities!

Gather your marbles or beads, and count them up. Next, line them up and get ready for a multiplication feast!

Scribble down your new fact and witness the magical identity property in action.



$$4 \times 1 = 4$$



Ready for an adventure? Next time you step out for a stroll, pick your favourite thing to count. Maybe you'll count trees, birds, or even bikes! Once you're back home, you can have some maths fun. Write down what you counted and use the identity property to create a multiplication fact. Then, go wild and switch things up with the commutative property!



$$\begin{aligned} 7 \times 1 &= 7 \\ 1 \times 7 &= 7 \end{aligned}$$





Visible numbers

Sometimes it helps to see the maths



Here is one unit.

If we count it one time, we have one unit.

$$1 \times 1 = 1$$



1 2



One unit counted two times equals 2 units.

$$1 \times 2 = 2.$$

When one is counted three times, it equals 3.

$$1 \times 3 = 3$$



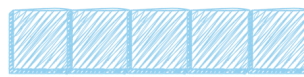
one counted 4 times equals 4

$$1 \times 4 = 4$$



one counted 5 times equals 5

$$1 \times 5 = 5$$



one counted 6 times equals 6

$$1 \times 6 = 6$$



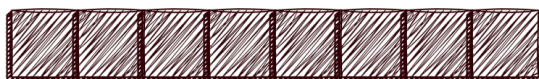
one counted 7 times equals 7

$$1 \times 7 = 7$$



one counted 8 times equals 8

$$1 \times 8 = 8$$



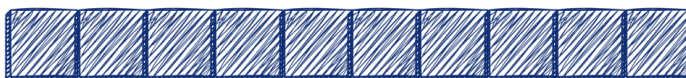
one counted 9 times equals 9

$$1 \times 9 = 9$$



one counted 10 times equals 10

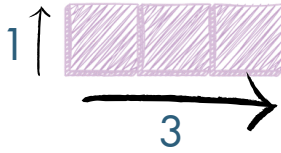
$$1 \times 10 = 10$$





Visible numbers

Sometimes it helps to see the maths



Look at a rectangle with **3** units stretching across and just **1** unit reaching up high. We dub these numbers "factors." Multiply them together and boom – you get 3!



Check out this rectangle, **1** unit wide and **3** units high. See how we multiplied 1 by 3 to get 3?

That's the commutative property of multiplication in action!



Can you write the multiplication fact for this rectangle?
It has 7 units across and only 1 unit up.

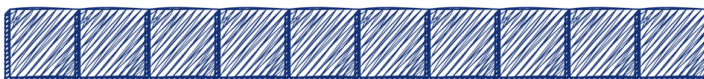


How about this one?



And this one?

Now you can do this one



And this one too!

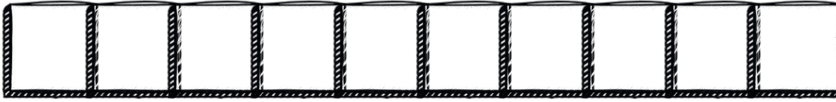




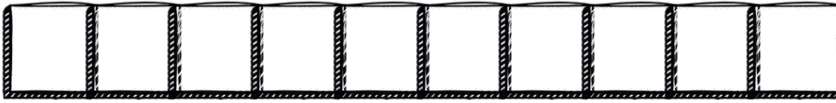
Visible numbers

Sometimes it helps to see the maths

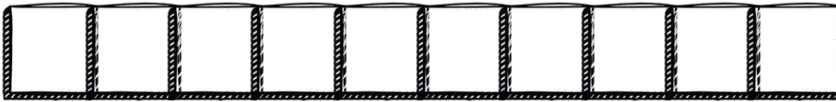
Colour in the correct number of blocks to show the multiplication fact.



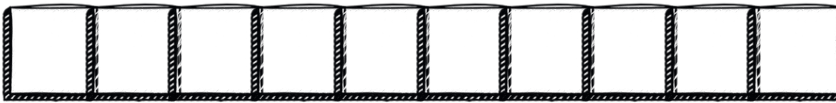
$1 \times 3 = \underline{\hspace{2cm}}$



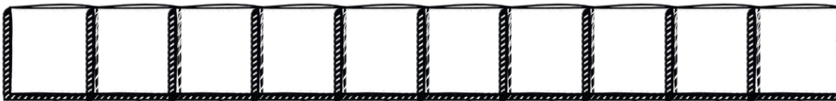
$1 \times 6 = \underline{\hspace{2cm}}$



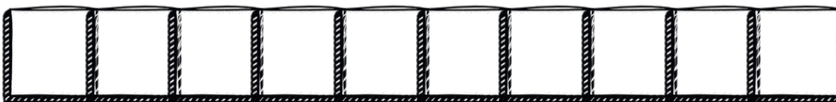
$1 \times 8 = \underline{\hspace{2cm}}$



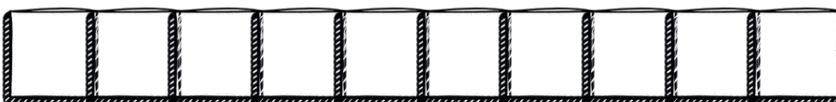
$1 \times 9 = \underline{\hspace{2cm}}$



$1 \times 2 = \underline{\hspace{2cm}}$



$1 \times 5 = \underline{\hspace{2cm}}$



$1 \times 10 = \underline{\hspace{2cm}}$



$1 \times 4 = \underline{\hspace{2cm}}$



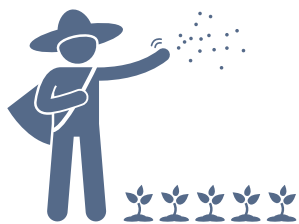
$1 \times 7 = \underline{\hspace{2cm}}$



In Real Life

Who knew multiplication could be such a useful tool in everyday life?

It's your big day, and you want to invite your whole squad of 5 friends. If you give each pal one invitation, how many invites will you need to write?



Imagine a hard-working farmhand earning \$15 for each hour of labor. How much cash will they pocket after a full hour of work?

A speedy train is zooming at 85 km/h. How much distance can it cover in 1 hour?



A soccer team scored 1 point in each of the last 3 games. How many points have they recorded over the last three games?

Let's crunch some numbers at the library! If nine people each borrow one book, how many books have been taken out in total?



Yeehaw! There are 8 cows chilling in the paddock, and guess what? Every one of them has a cute little calf. So, how many playful calves are hoofing around in the paddock?

Identity Property

Multiplying by 1

Learning goal:

- Practice multiplying by one and zero
- Use the commutative property of multiplication

$1 \times 6 =$

$6 \times 1 =$

25×1

$1 \times 4 =$

$4 \times 1 =$

$1 \times 36 =$

$1 \times 5 =$

$5 \times 1 =$

$49 \times 1 =$

$1 \times 2 =$

$2 \times 1 =$

$2 \times 9 \times 6 \times 0 =$

$1 \times 1 =$

$1 \times 1 =$

$1 \times 25 =$

$1 \times 8 =$

$8 \times 1 =$

$36 \times 0 =$

$1 \times 10 =$

$10 \times 1 =$

$0 \times 49 =$

$1 \times 3 =$

$3 \times 1 =$

$9 \times 0 \times 2 \times 5 =$

$1 \times 9 =$

$9 \times 1 =$

$18 \times 1 =$

$1 \times 7 =$

$7 \times 1 =$

$1 \times 18 =$

$1 \times 0 =$

$0 \times 1 =$

$1 \times 568 =$

How can I
use the
identity property
to explain
that 1 octopus has
8 tentacles?



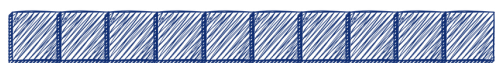
Identity Property

Multiplying by 1

Answers



$$7 \times 1 = 7$$



$$10 \times 1 = 10$$



$$1 \times 3 = 3$$



$$1 \times 6 = 6$$



$$1 \times 8 = 8$$



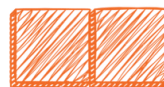
$$1 \times 9 = 9$$



$$1 \times 2 = 2$$



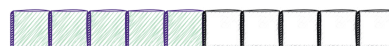
$$1 \times 5 = 5$$



$$2 \times 1 = 2$$



$$1 \times 4 = 4$$



$$1 \times 5 = 5$$



$$1 \times 10 = 10$$



$$1 \times 4 = 4$$



$$1 \times 7 = 7$$

IRL

- 5 invitations
- \$15.00
- 85 kms
- 3 points
- 9 books
- 8 calves

$$1 \times 6 = 6$$

$$1 \times 4 = 4$$

$$1 \times 5 = 5$$

$$1 \times 2 = 2$$

$$1 \times 1 = 1$$

$$1 \times 8 = 8$$

$$1 \times 10 = 10$$

$$1 \times 3 = 3$$

$$1 \times 9 = 9$$

$$1 \times 7 = 7$$

$$1 \times 0 = 0$$

$$6 \times 1 = 6$$

$$4 \times 1 = 4$$

$$5 \times 1 = 5$$

$$2 \times 1 = 2$$

$$1 \times 1 = 1$$

$$8 \times 1 = 8$$

$$10 \times 1 = 10$$

$$3 \times 1 = 3$$

$$9 \times 1 = 9$$

$$7 \times 1 = 7$$

$$0 \times 1 = 0$$

$$25 \times 1 = 25$$

$$1 \times 36 = 36$$

$$49 \times 1 = 49$$

$$2 \times 9 \times 6 \times 0 = 0$$

$$1 \times 25 = 25$$

$$36 \times 0 = 36$$

$$0 \times 49 = 49$$

$$9 \times 0 \times 2 \times 5 = 0$$

$$18 \times 1 = 18$$

$$1 \times 18 = 18$$

$$1 \times 568 = 568$$

