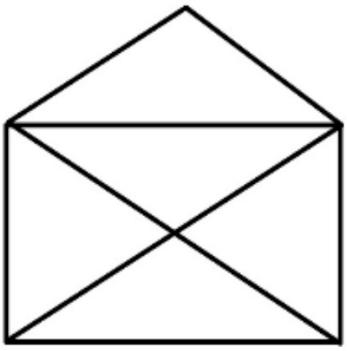
September 16, 2014 4th

Starter

How many different ways can you trace the image below with one continuous line that doesn't retrace any lines?



at least 10

9/16 - Multiplying Integers

"Multiplication is repeated addition."

Discuss with your partner why it is true and be ready to share.

They are the same answer.

Numerical example:

3×2 add 3 two times
add 2 three times

Integer counters

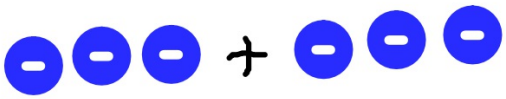
$3 \times 2 =$

$= 6 =$

$3 \times (-2) =$

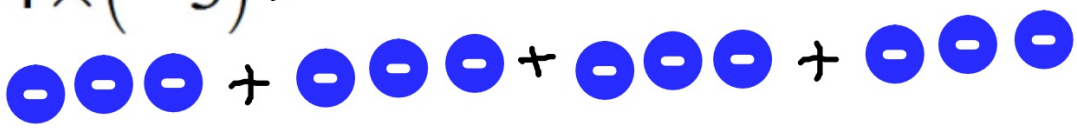
$= -6$

$2 \times (-3) =$

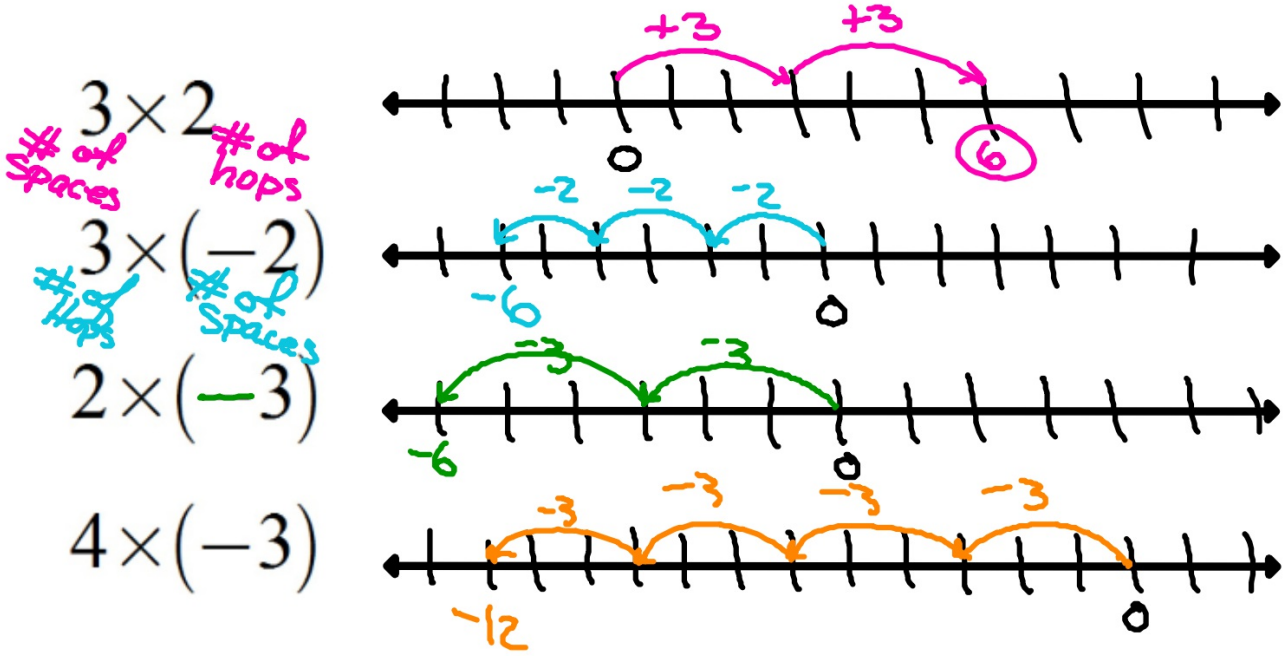


$= -6$

$4 \times (-3) = -12$



Numberlines



Patterns

Work with a partner. Use a table to find $-3 \bullet 2$.

Describe the pattern of the products in the table. Then complete the table.

2	•	2	=	4
1	•	2	=	2
0	•	2	=	0
–1	•	2	=	-2
–2	•	2	=	-4
–3	•	2	=	-6

2

counting down by 1's

counting down by 2's

$-3 \bullet 2 =$ -6

Work with a partner. Use a table to find $-3 \bullet (-2)$.

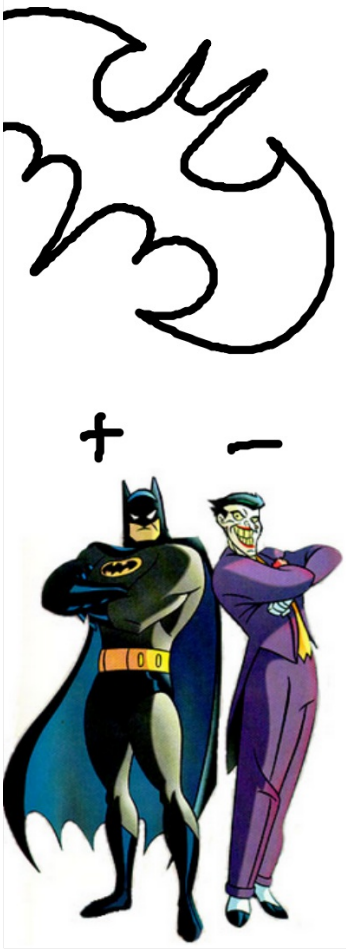
Describe the pattern of the products in the table. Then complete the table.

-3	$\bullet$	3	$= -9$
-3	$\bullet$	2	$= -6$
-3	$\bullet$	1	$= -3$
-3	$\bullet$	0	$= 0$
-3	$\bullet$	-1	$= 3$
-3	$\bullet$	-2	$= 6$

count down by 1's

count up by 3's

$-3 \bullet (-2) =$ 6



RULES

Person		Act		
+	×	+	=	+
Batman		$1 mill		Good
+	×	−	=	−
Batman		Hit by a Truck		Bad
−	×	+	=	−
Joker		$1 mill		Bad
−	×	−	=	+
Joker		Hit by a Truck		Good

Homework

Yellow WS5

Due Wednesday