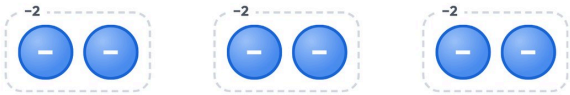
Names (pair) _____ Date _____

Multiplying a Positive and a Negative Number

Example

3 × (−2) = ?

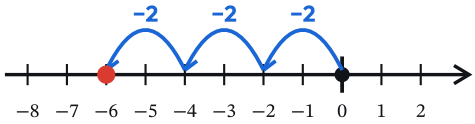
Add set 3 of −2.



$3 \times (-2)$ means 3 groups of (-2):

$(-2) + (-2) + (-2) = -6$

On the number line: three jumps of 2 to the left.



1 ON YOUR OWN Write as an addition and work it out.

$4 \times (-3) =$ ☐ $=$ ☐

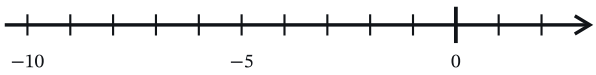
$2 \times (-5) =$ ☐ $=$ ☐

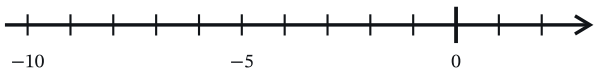
$5 \times (-1) =$ ☐ $=$ ☐

2 IN PAIRS Draw the jumps and work it out.

$4 \times (-2) =$ ☐

$3 \times (-3) =$ ☐





3 ON YOUR OWN Factors may swap places. Work out: $(-2) \times 3 = 3 \times (-2)$.

$(-2) \times 3 =$ ☐

$(-4) \times 5 =$ ☐

$(-1) \times 9 =$ ☐

Names (pair) _____ Date _____

Remember

The product of a positive and a negative number is **negative**. The absolute value of the product is the product of the absolute values: $|4 \times (-3)| = 4 \times 3 = 12$, so $4 \times (-3) = -12$. A product with zero is 0.

4 ON YOUR OWN Work out.

$7 \times (-3) =$ ☐ $(-8) \times 4 =$ ☐ $(-10) \times 6 =$ ☐

$12 \times (-5) =$ ☐ $(-1) \times 25 =$ ☐ $0 \times (-7) =$ ☐

5 IN PAIRS Write the calculation and solve.

a) The temperature falls by 3 °C every hour. How much does it change in 4 hours?

☐

b) Each week Mia spends 5 euros more than she earns. How does her balance change in 6 weeks?

☐

6 IN A GROUP CHALLENGE The product of two integers is -12. Write all such pairs.

_____

_____

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Operations mode: enter 3, choose $\times$ and enter -2. Step through, then do the same for 3×2. What is the same and what is different?

★ ON YOUR OWN **Exit card.** $6 \times (-4) =$ ☐ $(-9) \times 3 =$ ☐