

Order of Operations 1

Mathematicians have decided in which order we calculate if there are many operations:

1. First, we calculate what is inside the **PARENTHESES** ().
2. Then, we **MULTIPLY** before adding or subtracting.
3. Lastly, we **ADD** and **SUBTRACT** from left to right.

Example 1. Here, the multiplication is done before subtraction:

$$45 - 3 \times 4$$
$$= 45 - 12$$
$$= 33$$

Example 2. Both multiplications are done before adding:

$$5 \times 2 + 2 \times 10$$
$$= 10 + 20$$
$$= 30$$

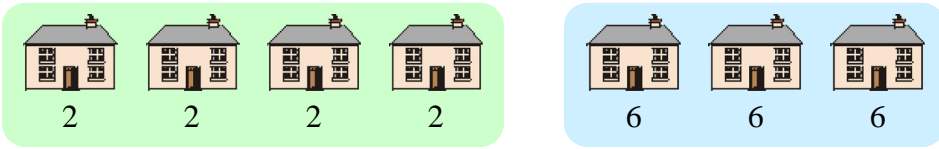
*In this lesson, we will not have any parentheses in the problems.
We will focus on addition, subtraction, and multiplication.*

1. Add and subtract from left to right. This means the first operation you do is the first one from the left. You can circle the operation to do **FIRST** in a “bubble” or a “balloon”!

a. $15 + 7 - 3$	b. $15 - 7 + 3$	c. $100 - 40 - 40 + 20$
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2. Calculate. Circle the operation to be done first. Remember to multiply first!

a. $5 + 4 \times 2$ $5 + 8 = \underline{\quad}$	b. $10 + 5 \times 4$	c. $20 - 4 \times 4$
d. $2 \times 6 + 2 \times 7$	e. $3 \times 5 - 2 \times 4$	f. $2 \times 5 + 1 \times 4$
g. $5 + 1 \times 2 + 5$	h. $30 - 2 \times 2 - 10$	i. $50 - 3 \times 2 + 6$





How many people are living in these houses? We can **multiply and add**:

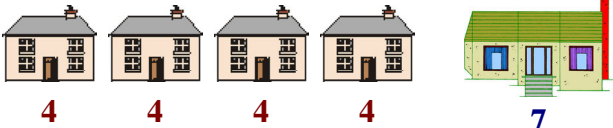
$$4 \times 2 + 3 \times 6 = \underline{\hspace{2cm}}$$


8 18


3. How many people live in the houses? Write a number sentence for each illustration.

a.  $\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} + \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$

b.  $\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} + \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$

c.  $\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$

d.  $\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} + \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$

e.  $\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} + \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$