

Really Good Stuff® Activity Guide

Order of Operations Poster

Congratulations on your purchase of the Really Good Stuff® **Order of Operations Poster**—a colorful reference poster to help your students remember the order of operations as they solve math problems.

Included in this Really Good Stuff® set you'll find:

- Order of Operations Poster, 19" x 24"
- This Really Good Stuff® Activity Guide

Introducing the Order of Operations Poster

Display the poster in an area that is visible to your students. Point to the acronym at the top of the poster and tell students that this is a common way to remember the order of operations. By repeating the acronym several times throughout your lesson, you will help students to remember it.

Point to the first word of the acronym, Please = Parentheses. Explain to students that if a problem contains parentheses, the operations inside them are always done first. Draw students' attention to the green section of the poster, and explain how the green arrows indicate that the operations inside the parentheses are being completed ($2 \times 9 = 18$ and $16 \div 4 = 4$).

Point to the second word of the acronym, Exclude = Exponents. Explain to students that if exponents are included, they are always computed next in the process. Mention that the blue arrow indicates that we are now computing 4^3 , which equals 64.

Next, tell students that the "My Dear" words of the acronym indicate that multiplication and/or division are included in the next step of the process. Stress that multiplication and division are part of the same step, and they should be computed in the order (left to right) in

Follow the Order of Operations

This acronym will help you to remember the order for solving problems with more than one operation:

Please Exclude My Dear Aunt Sally

Please = Parentheses
Excuse = Exponents
My Dear = Multiplication and/or Division
Aunt Sally = Addition and/or Subtraction

(2 x 9) + (16 ÷ 4)³ x 5 - 6 ÷ 2 = _____ The Equation to Solve

Please 18 + 4³ x 5 - 6 ÷ 2 = _____ Parentheses

Excuse 18 + 64 x 5 - 6 ÷ 2 = _____ Exponents

My Dear 18 + 320 - 3 = _____ Multiplication and/or Division

Aunt Sally 338 - 3 = _____ Addition and/or Subtraction

335 The Answer

which they appear. This acronym does not imply that multiplication should always be done before division. The darker purple arrows illustrate that multiplication is being computed ($64 \times 5 = 320$), while the lighter purple arrows show that division is occurring ($6 \div 2 = 3$).

"Aunt Sally" demonstrates that addition and subtraction should be computed during the final step of the process and, similar to "My Dear", they should be calculated in the order (left to right) in which they appear. In this example, the pink arrows mark the addition step ($18 + 320 = 338$), while the orange arrow denotes the subtraction ($338 - 3 = 335$).

Be sure to explain to students that not all problems will include every operation. Students should follow this order each time they solve a problem with multiple operations, simply omitting the steps that do not apply to the equation they are solving.

Example: $(12 \div 4) + 6 \times 2 - 1 = \underline{\hspace{2cm}}$
Parentheses: $3 + 6 \times 2 - 1 = \underline{\hspace{2cm}}$
Exponents: none, so skip this operation
My Dear: $3 + 12 - 1 = \underline{\hspace{2cm}}$
Aunt Sally: $14 = \underline{\hspace{2cm}}$
AnsWER: 14

Reproducible 1

**“Please Exclude My
Dear Aunt Sally”**



Please = Parentheses

Excuse = Exponents

My Dear = Multiplication and/or Division

Aunt Sally = Addition and/or Subtraction

Solve the following equations in the correct order.
Use the acronym above to help you along the way.

Equation to solve: $2^3 + (4 \times 5) - 14 \div 2 =$
Parentheses: $2^3 + \underline{\hspace{2cm}} - 14 \div 2 =$
Exponents: $\underline{\hspace{2cm}} + \underline{\hspace{2cm}} - 14 \div 2 =$
Multiplication/Division: $\underline{\hspace{2cm}} + \underline{\hspace{2cm}} - \underline{\hspace{2cm}} =$
Addition/Subtraction: $\underline{\hspace{4cm}} =$
Answer: $\underline{\hspace{4cm}}$

Equation to solve: $(9 + 11) \div 2 + 4^2 - 12 =$
Parentheses: $\underline{\hspace{2cm}} \div 2 + 4^2 - 12 =$
Exponents: $\underline{\hspace{2cm}} \div 2 + \underline{\hspace{2cm}} - 12 =$
Multiplication/Division: $\underline{\hspace{4cm}} + \underline{\hspace{2cm}} - 12 =$
Addition/Subtraction: $\underline{\hspace{4cm}} =$
Answer: $\underline{\hspace{4cm}}$

Equation to solve: $15 \div 3 + 25 \times 2^2 =$
Parentheses:
Exponents: $15 \div 3 + 25 \times \underline{\hspace{2cm}} =$
Multiplication/Division: $\underline{\hspace{2cm}} + \underline{\hspace{2cm}} =$
Addition/Subtraction: $\underline{\hspace{4cm}} =$
Answer: $\underline{\hspace{4cm}}$

Equation to solve: $(9 - 5)^3 - 14 \times 3 - 8 =$
Parentheses: $\underline{\hspace{2cm}}^3 - 14 \times 3 - 8 =$
Exponents: $\underline{\hspace{2cm}} - 14 \times 3 - 8 =$
Multiplication/Division: $\underline{\hspace{2cm}} - \underline{\hspace{2cm}} - 8 =$
Addition/Subtraction: $\underline{\hspace{4cm}} =$
Answer: $\underline{\hspace{4cm}}$

Please = Parentheses

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Follow the order of operations to solve the equations below.

Equation to solve: $47 - 3^3 - 12 \div 4 + 5^2 =$

Parentheses: _____

Exponents: _____

Multiplication/Division: _____

Addition/Subtraction: _____

Answer: _____

Equation to solve: $81 \div (9 \div 3) + 3^4 =$

Parentheses: _____

Exponents: _____

Multiplication/Division: _____

Addition/Subtraction: _____

Answer: _____

Equation to solve: $56 - (9 - 8)^2 \times 5 + 29 =$

Parentheses: _____

Exponents: _____

Multiplication/Division: _____

Addition/Subtraction: _____

Answer: _____

Equation to solve: $128 \div 4 + (95 \div 5) - 18 =$

Parentheses: _____

Exponents: _____

Multiplication/Division: _____

Addition/Subtraction: _____

Answer: _____

Please = Parentheses

Excuse = Exponents

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Solve the equations below by correctly following the order of operations.

1. Equation to solve: $8^2 \div 4^2 + (5 \times 2)^2 + 12 =$

Answer: _____

2. Equation to solve: $94 - (28 - 25)^3 - 12 \div 6 =$

Answer: _____

3. Equation to solve: $(98 \div 2) - 4^2 \times 3 + 144 =$

Answer: _____

4. Equation to solve: $100 + (3 \times 4)^2 \div 4 - 7 \times 2 =$

Answer: _____