

Reteaching 1-2

Exponents and Order of Operations

OBJECTIVE: Using the order of operations

MATERIALS: Three index cards or small pieces of paper

Review the order of operations to help you with this activity.

Order of Operations

1. Perform any operations inside grouping symbols.
2. Simplify any term with exponents.
3. Multiply and divide in order from left to right.
4. Add and subtract in order from left to right.

Example

Write + on the first index card, - on the second card, and × on the third card. Shuffle the cards and place them face down on your desk. Randomly pick cards to fill in the blanks with operation signs. Once you have filled in the operation signs, simplify the expression.

- | | |
|---|---|
| $6 \underline{\quad} (9 \underline{\quad} 7) \underline{\quad} 8$ | ← Pick cards to fill in the blanks with operation signs. |
| $6 \times (9 - 7) + 8$ | ← Subtract 7 from 9 inside the grouping symbols. |
| $6 \times 2 + 8$ | ← Do multiplication and division first. Multiply 6 by 2. |
| $12 + 8$ | ← Do addition and subtraction last. Add 12 and 8 to get the answer. |
| 20 | ← The answer is 20. |

Exercises

Randomly pick cards to fill in the operation symbols of the following expressions. Simplify the expressions.

- | | |
|---|--|
| 1. $7 \underline{\quad} 5 \underline{\quad} 1$ | 2. $(3 \underline{\quad} 9) \underline{\quad} 4$ |
| 3. $8 \underline{\quad} 2 \underline{\quad} (5 \underline{\quad} 10)$ | 4. $(3 \underline{\quad} 7 \underline{\quad} 6) \underline{\quad} 1$ |

Simplify each expression by following the order of operations.

- | | |
|--------------------------------|------------------------------|
| 5. $(5 \cdot 3) - 18$ | 6. $5 \cdot (3 - 18)$ |
| 7. $2 \cdot (27 - 13 \cdot 2)$ | 8. $2 \cdot 27 - 13 \cdot 2$ |
| 9. $18 \div (9 - 15 \div 5)$ | 10. $18 \div 9 - 15 \div 5$ |
| 11. $2 \cdot 8 - 6^2$ | 12. $2 \cdot (8 - 6^2)$ |