**Order of Operations Notes**

Warm Up: If your class were given the following problem to simplify, would everyone get the same answer if you did it in any order you wanted? **30 - 12 ÷ 2 + 4 · 3 - 5**

*Possible Answers:*

Order of operations is a series of steps to solve numerical expressions.

1. Perform operations in **grouping symbols** first
   1. Always start with the inner most parenthesis
   2. Parentheses disappear with only one number inside
2. Find the values of the number with **exponents**
3. **Multiply or divide** from left to right as ordered in the problem.
4. **Add or subtract** from left to right as ordered in the problem.

Helpful Hint:

The following chart resembles a hopscotch board. It is to remind you that when you land on multiplication/division, or addition/subtraction, both of your legs are touching a box which means that you must do whichever one comes first from left to right.

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REMEMBER:

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1. You must follow order of operations WITHIN parentheses.
2. A number next to a parenthesis with nothing in between means to multiply!!!

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| 9 + 12 x 2 | 4 x 32 + 8 – 16 |
| 5 + 12 ÷ 6 – 3 | 42 + 48 ÷ (10 –4) |
| (2+33)-42÷2•2-1 |  |

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| 81 ÷ (9 x 9) + 43 | (7+2) ▒2 = 7 Find the missing number. |
| 61 + 5 x 10 ÷ 2 -70 | • |
| (22 + 18) + 3 – 5 x 4 | 53-3(93+1)2 |
| 21 ÷ (3 + 4) x 9 - 23 | 16+12-3+4-8+3(2+1)2 |
| Regina bought 5 carved wooden beads for $3 each and 8 glass beads for $2 each. Write and evaluate the expression. | Fill in the boxes with the correct operations  16 ▒ 8 ▒ 4 ▒ 3 ▒ 22 = 24 |
| Tyler walked 2 miles a day for the first week of his exercise plan. Then he walked 3 miles for the next nine days. How many miles did Tyler walk? | Place a set of parentheses in the correct position  8  9  3 – 3 + 7 = 28 |