

**MAT 0028 Bookmark**

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| **In the Learning Commons:**  **Face-to-face Assistance:** The Learning Commons provides face-to-face assistance on Foundations math problems and study strategies.  **Handouts:** The Learning Commons offers handouts to help students understand important concepts in Foundations for College Math 2.  **Hands-on items** are available at the Learning Commons such as fraction activities.  **Online:**  The Learning Commons provides online tutoring through a service called BrainFuse. You can find the button to reach it in your canvas shell. This connects you to a live person via chat. You can upload pictures of problems or just type them in, and they will guide you through.  **Order of Operations**   |  |  |  | | --- | --- | --- | | **Please** | **P** | Parentheses and Grouping Symbols (inside first) | | **Excuse** | **E** | Exponents | | **My Dear** | **M D** | Multiplication or Division from left to right | | **Aunt Sally** | **A**  **S** | Addition or Subtraction from left to right |   **Math Translation Words**   |  |  | | --- | --- | | + 🡪 Sum, increased by, addition, more than | x 🡪 Product, multiply, of | | **-** 🡪Difference, subtract, decreased by, less than | 🡪Divide, quotient | | = 🡪 Equal, is |  |   \*If AB = 0, then A = 0 or B = 0  \*If x2 = k, k > 0, then x = + |



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**Exponent Rules**

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**Factoring Summary**

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| **GCF:** |  | |
| **4 terms-grouping** |  | |
|  | : find factors of **-**12, add to 4, 🡪(x **-** 2)(x+6) | |
|  | (x-y)(x+y) | |
|  | Does not factor/prime | |
|  | : factors of  3&8 that give difference of 2 | (3,1) & (1,2,4,8)  4·1 – 3·2 = 4 – 6= -2  🡪 (3x - 4)( x + 2) |
| **Perfect squares** | p2+ 2pq + q2 : 🡪 (2x – 3)2 | |

**Factoring steps when solving quadratic:**

1. Get the equation = 0
2. Factor out any common terms
3. Is it a difference of two squares?
4. Does it have 4 terms (grouping)
5. For a trinomial, use AC or trial/error.
6. Set all factors with a variable = 0 and solve.