



Roll & Factor- GCF

Directions: Use your thinking map to help you with this game.

1. Roll your 10-sided die as many times as there are blanks for each problem.
Note: a roll of 0 should be recorded as a 10.
2. Once all the blanks are filled in for a problem, take 30 seconds to decide if there is a **common factor** and **circle** yes or no.
3. If there is a common factor, factor it out.

Ex: $__ x^2 + __ x + 6$

Rolls were 4 and 2.

New expression is $4x^2 + 2x + 6$

Is there a **common factor**? **YES** NO

Factor out the GCF: $2(2x^2 + x + 3)$

1. $__ x^2 + 4x + __$

Rolls: $______$ & $______$

New Expression:

Is there a **common factor**? YES NO

Factor out the GCF:

2. $__ x^2 + 4x + __$

Rolls: $______$ & $______$

New Expression:

Is there a **common factor**? YES NO

Factor out the GCF:

3. $\underline{\quad}x^3 + \underline{\quad}x^2 + \underline{\quad}x$

Rolls: $\underline{\quad}$, $\underline{\quad}$ & $\underline{\quad}$

New Expression:

Is there a **common factor**? YES NO
Factor out the GCF:

4. $2x^2 + \underline{\quad}x + 12$

Roll: $\underline{\quad}$

New Expression:

Is there a **common factor**? YES NO
Factor out the GCF:

5. $\underline{\quad}x^4 + \underline{\quad}x^2 + 24x^3$

Rolls: $\underline{\quad}$ & $\underline{\quad}$

New Expression:

Is there a **common factor**? YES NO
Factor out the GCF:

6. $\underline{\quad}x^2 + 12x + \underline{\quad}$

Rolls: $\underline{\quad}$ & $\underline{\quad}$

New Expression:

Is there a **common factor**? YES NO
Factor out the GCF:

