## Monomial Factor Game with Integers

## Rules

> Team 1 selects two monomials from the bottom of the Game Board (and places a paperclip on each one).
> Team 1 places one of their counters (or tiles) on the PRODUCT of those two monomials. This is now their square.
$>$ Team 2 selects ONE of the paperclips to move to any other factor from the bottom (note: it is okay to have two paperclips on the same factor).
$>$ Team 2 now places one of their counters (or tiles) on the product of the two factors being covered with paperclips.
> Teams continue taking turns, each time moving only 1 of the paperclips and always marking the product of the two monomials covered with paperclips with their team marker.
$>$ The winner is the first team to have 4 spaces marked in a row (horizontally, vertically or diagonally).

## Reminder about rules with integers:

```
-• - =
```

$\qquad$

```
-•+=
```

$\qquad$

```
+•-=
```

$\qquad$

```
+\bullet+ =
```

$\qquad$

## Reminder about multiplying with variables (Note: \# represents a number without any variables (also called a constant).

$\qquad$
$x \cdot \#=$ $\qquad$
\# • \# = $\qquad$

Monomial Factor Game Game Board

| $6 x^{2}$ | -1 | $-6 x$ | $3 x$ | $9 x^{2}$ | $8 x$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| -2 | $-8 x$ | $-x$ | $x$ | $-4 x^{2}$ | -9 |
| -6 | $4 x^{2}$ | $-4 x$ | $2 x^{2}$ | -3 | $-2 x^{2}$ |
| $4 x$ | $x^{2}$ | $9 x$ | $-2 x$ | $-9 x$ | $-6 x^{2}$ |
| 9 | 3 | 6 | $-9 x^{2}$ | $3 x^{2}$ | $-4 x^{2}$ |
| $8 x^{2}$ | $6 x$ | $2 x$ | $-3 x$ | 2 | 1 |

Factor Choices
$\begin{array}{lllllllllll}-3 & -2 & -1 & -3 x & -2 x & x & 2 x & 3 x & 1 & 2 & 3\end{array}$

