

# TRI GAME

## OBJECT OF THE GAME

Identify sets of three cards that have a *greatest common factor* (GCF) containing  $x$  or  $y$  and a coefficient greater than 1. This is known as a *TRI set*. The player with the most TRI sets wins.

## NUMBER OF PLAYERS

2 or more

## HOW TO PLAY

1. Shuffle the cards and place nine cards face up on the table so all players can see and reach them.
2. The players look at the cards and when a player identifies a TRI set, that player says “TRI” and the game is paused.
3. That player points to the three cards and shares the GCF of that set.
4. The other player(s) check, and if the GCF is correct, the player who said “TRI” collects those three cards and draws three new cards from the deck to put in their place. If the GCF is incorrect, the person who corrected the player collects the three cards into their winning pile.

If the players decide that there is not a TRI set on the table, then the cards are collected and shuffled back into the deck. Then nine new cards are drawn and placed face up on the table. The game is over when there are no longer any TRI sets or any more cards available to draw.

**OBJECT OF THE GAME:** Identify sets of three cards that have a *greatest common factor* (GCF) containing  $x$  or  $y$ , other than  $1x$  or  $1y$ .  
The player with the most sets wins.

**NUMBER OF PLAYERS:** 2 or more

**HOW TO PLAY:** Shuffle the cards and place nine cards face up on the table so all players can see and reach them. Say “TRI” when you see a set of cards that have a GCF containing a letter. Share the GCF with the other player(s). Collect your set and replace it with new cards from the deck.

$$12x$$

$$12y^2$$

$$16x^3$$

$$16y^4$$

$$18x^5$$

$$18y$$

$$20x^2$$

$$20x^3$$

$$24x^4$$

$$24y^5$$

$$28x$$

$$28y^2$$

$$30x^3$$

$$30y^4$$

$$32x^5$$

$$32y$$

$$36x^2$$

$$36y^3$$

$$40x^4$$

$$40y^5$$

$$42x$$

$$42y^2$$

$$45x^3$$

$$45y^4$$

$$48x^5$$

$$48y$$

$$50x^2$$

$$50y^3$$

$$52x^4$$

$$54y^5$$

$$54x$$

$$56y^2$$

$$60x^3$$

$$60y^4$$

$$63x^5$$

$$63y$$

$$64x^2$$

$$64y^3$$

$$70x^4$$

$$70y^5$$

$$72x$$

$$72y^2$$

$$75x^3$$

$$75y^4$$

$$80x^5$$

$$80y$$

$$81x^2$$

$$81y^3$$