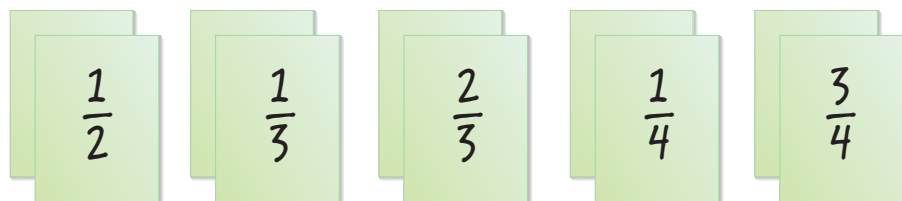


9 How Low Can You Go?



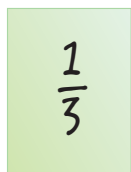
Pairs

Start Write each fraction below on two index cards.

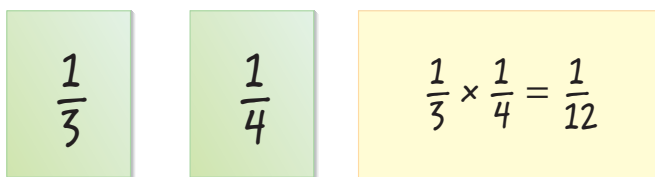


Mix the cards and place all 10 cards face down in one stack.

1. Each player draws a card. The fraction on the card is that player's starting value. For example:



2. Each player draws another card and multiplies the fraction on the card by the starting value.



3. Continue taking turns, drawing one card at a time and multiplying each new fraction by the previous product.
4. When all the cards have been used, the winner is the player with the product that is less.
5. Play the game again.
6. **Look Back** Is it better to pick $\frac{3}{4}$ or $\frac{1}{4}$? Why?
7. **Analyze** Can you ever have a product of 0? Explain.

Extend Make a new stack of cards with the numbers $\frac{1}{2}$, 3, $\frac{1}{3}$, 4, $\frac{2}{3}$, and 5. Play the game again with the new cards. Don't simplify until you reach the final product.