

Decimal Division Clash Directions

Materials:

- Number cards: 4 each of the numbers 1–9
- Decimal Division game boards
- Scrap paper & pencil

Number of Players: 2 or 3

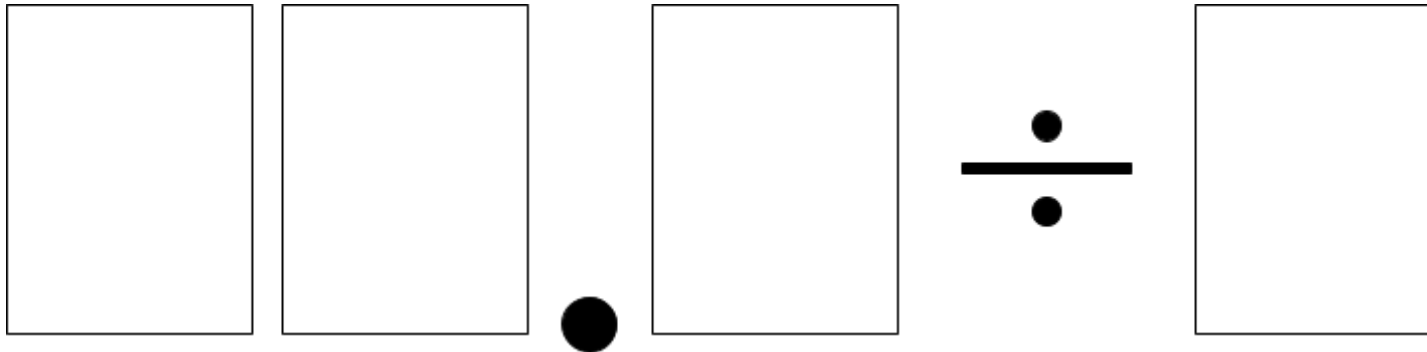
Rules:

- Shuffle the cards and place the deck number-side down.
- Each player takes 4 cards.
- Use the cards to form a dividend and a divisor.
- The player with the largest quotient wins a round.

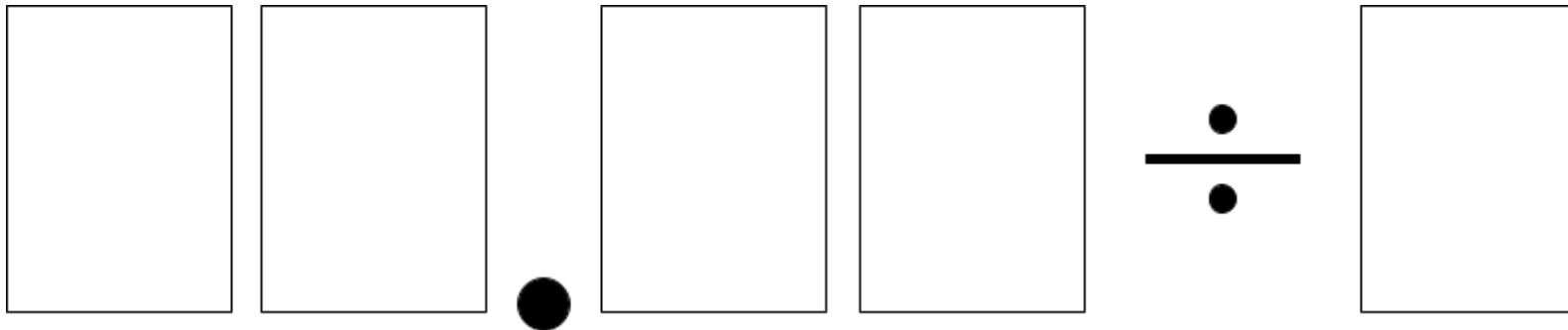
Variations:

- Use more cards, larger dividends, and/or larger divisors.
- Try to make the smallest quotient possible.
- Place each card after you draw it, before you see the other cards.

Game Board 1:



Game Board 2:



Powers of 10 Yatzy Instructions

Materials: 1 die or a spinner; Recording Sheet

Number of Players: 2 or more

Directions:

1. Take turns rolling the die or spinning the spinner until each has rolled 5 times. Each time you roll the die you are rolling a power of 10. **The base number is always 10. The number on the die is the exponent**
2. Player 1 rolls the die, writes the number as 10 to whatever power is indicated on the die and finds the value for that expression. Both players write the exponential expression on their recording sheets and may check the solution with a calculator.
3. It is then player 2's turn to roll the die, write the expression and find the value.
4. Continue taking turns until each of you has had 5 turns. Record both the five turns for player one and the five turns for player two. At that point the players each find the sum of their answers.

Sample Game:

| Player 1 | | | Player 2 | | |
|------------------|--|---------|------------------|--|---------|
| Exponential Form | Expanded Form | Value | Exponential Form | Expanded Form | Value |
| 1. 10^3 | $10 \times 10 \times 10$ | 1,000 | 1. 10^2 | 10×10 | 100 |
| 2. 10^5 | $10 \times 10 \times 10 \times 10 \times 10$ | 100,000 | 2. 10^5 | $10 \times 10 \times 10 \times 10 \times 10$ | 100,000 |
| 3. 10^1 | 10 | 10 | 3. 10^2 | 10×10 | 100 |
| 4. 10^3 | $10 \times 10 \times 10$ | 1,000 | 4. 10^5 | $10 \times 10 \times 10 \times 10 \times 10$ | 100,000 |

| | | | | | |
|-----------|--|---------|-----------|----|---------|
| 5. 10^2 | | 100 | 5. 10^1 | 10 | 10 |
| Total | | 102,110 | Total | | 200,110 |

Player 2 wins (or spin a more/less spinner)

Powers of 10 Yatzy Recording Sheet

Game 1

| Player 1 | | | Player 2 | | |
|------------------|---------------|-------|------------------|---------------|-------|
| Exponential Form | Expanded Form | Value | Exponential Form | Expanded Form | Value |
| 1. | | | 1. | | |
| 2. | | | 2. | | |
| 3. | | | 3. | | |
| 4. | | | 4. | | |
| 5. | | | 5. | | |
| Total | | | Total | | |

Game 2

| Player 1 | | | Player 2 | | |
|------------------|---------------|-------|------------------|---------------|-------|
| Exponential Form | Expanded Form | Value | Exponential Form | Expanded Form | Value |
| 1. | | | 1. | | |
| 2. | | | 2. | | |
| 3. | | | 3. | | |
| 4. | | | 4. | | |

| | | | | | |
|-------|--|--|-------|--|--|
| 5. | | | 5. | | |
| Total | | | Total | | |

Target Number

The purpose of this game is to combine 5 cards to make a number, using addition, subtraction, multiplication, or division.

Materials

- Deck of cards (Aces are 1, Jacks are 11, Queens are 12, Kings are 13)

Directions

- Shuffle and deal 5 cards to each player.
- Place the rest of the cards between the players.
- Turn over the top card: this is the number you are trying to make, the **Target Number**
- Each player combines their own cards with the operations of addition, subtraction, multiplication, or division, to come as close as possible to the target number using as many cards as possible.
- A card may only be used once.
- Each player records their solution as an equation.

This is the end of the round.

The player who scores closest to the target number gets 5 points. Get another point for every card you use. If you match the target number exactly, get 5 bonus points.

Pick a new **target number** for each round.

Play as long as time allows.

Variation

- Play collaboratively, trying to come as close as possible to the target number.
- Turn over two cards and make the **target number** a two-digit number.

Example

- **Target number: 8**
- **Cards drawn: 6, 4, 3, 4, 11**

$$6 + 3 - 11 + 4 + 4 = 6$$

$$(4 \times 4) - 11 + 6 - 3 = 8$$

$$(6 \times 4) - 11 - 4 - 3 = 6$$

etc.

Ten Thousand!

Play with a partner

Materials: dice

Directions:

- Roll each die five times until all the squares are filled.
- Whoever has the product closest to 10,000 wins.

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