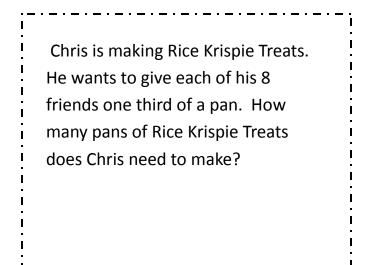
# Fast Fractions

**Directions:** Cut out the cards and place them face down in a pile. Each player will pick up a card and use chalk to draw a picture that represents the answer. Switch cards and check if your opponent was correct. Award a point for each correct answer.

· · · · · · · · · · · · · · · · · · ·	i.
Johnny cut a pizza into eighths. He	 
and his two friends ate a piece.	  - 
What fraction of the pizza is	:
remaining?	ļ
I	I -
!	1
1	-
1	

Fran has 7/8 of her homework complete. Bobby has 2/3 of his homework finished. Who had completed more of their work?



Sandy cuts a piece of paper into thirds. She then cuts each of the three pieces into thirds. If she give her sister one of the new pieces how much of the paper does she still have? Sam is making homemade ice cream for the 4th of July. The recipe calls for 2 cups of sugar. Sam only has a quarter cup measure. How many quarter cup scoops will she need to use? Draw a tape diagram that is 2/3 shaded. Draw a fraction that is greater than 2/3. Draw a fraction that is less than 2/3.

Mr. Smith is painting a wall. He is 1 fifth finished. Draw a picture and label the part of the wall that is finished and the part that is incomplete. Make a number bond to match the problem. Mr. Ramos wants to nail the TV cord against the wall so no one trips. He puts 7 nails equally spaced along the cord. Draw a number line representing the cord. Label it from 0 at the start of the cord to 1 at the end. Mark where Mr. Ramos puts each nail with a fraction.

Dan drove his boat for 5 thirds of an hour before having to get gas. Afterward he drove 2 thirds and hour to get home. How along did Dan Drive? When the whole is the same, why does it take 4 copies of 1 tenth to show 2 copies of 1 fifth? Draw a model to support your answer.



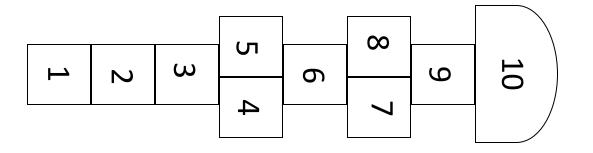
1. **Draw a hopscotch design on the ground.** Number the boxes 1-10 as shown. Add a math problem to each space. This is a great way to practice your multiplication, division, addition, or subtraction facts. Some

cards have been provided but feel free to make up your own.

- 2. Throw a flat stone or similar object (small beanbag, shell, button, plastic toy) to land on square It has to land inside the square without touching the border or bouncing out. If you don't get it within the lines, you lose your turn and pass the stone to the next person. If you do get it, however, go on to the next step.
- 3. Hop through the squares, skipping the one you have your marker on. Each square gets one foot. Which foot you start with is up to you. You can't have more than one foot on the ground at a time, *unless* there are two number squares right next to each other. In that case, you can put down both feet simultaneously (one in each square). Always keep your feet inside the appropriate square (s); if you step on a line, hop on the wrong square, or step out of the square, you lose your turn.
- 4. **Pick up the marker on your way back.** When you get to the last number, turn around (remaining on one foot) and hop your way back in reverse order. While you're on the square right before the one with your marker, lean down (probably on one foot still!) and pick it up. Then, skip over that square and finish up.
- 5. **Pass the marker on to the next person.** If you completed the course with your marker on square one (and without losing your turn), then throw your marker onto square two on your next turn. Your goal is to complete the course with the marker on each square. The first person to do this wins the game!

Hopscotch can be played with just one person. If that's your case, make up the rules as you see fit!

Change the level of difficulty by changing the board.





Multiply by 12	Multiply by 7	Multiply by 11
Multiply by 6	Multiply by 25	Multiply by 4
Multiply by 3	Multiply by 30	Multiply by 40

$\frac{1}{200} \frac{1}{90} $			
Add 30	Add 120	Subtract 50	
Subtract 19	Add 25	Add 10	
Subtract 10	Add 110	Subtract 90	



#### **Fractions**

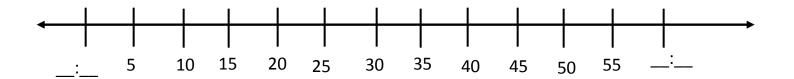
Create number lines for unit fractions such as 1/2, 1/3, 1/4.....

Number lines can go up to or surpass 1 whole.

Roll a die and hop down the number line and back counting by the unit fraction.

#### <u>Time</u>

Create a number line to represent a clock.



Pick a card for a starting time.

Label the starting hour and ending hour.

Pick an elapsed time card.

Hop down the number line the amount of time represented on the elapsed time card. Rename the hours as necessary.

This can be played one player at a time or as a group.



Start Time Cards

1:05	3:30	2:15
5:45	11:50	9:20
8:10	6:00	4:55



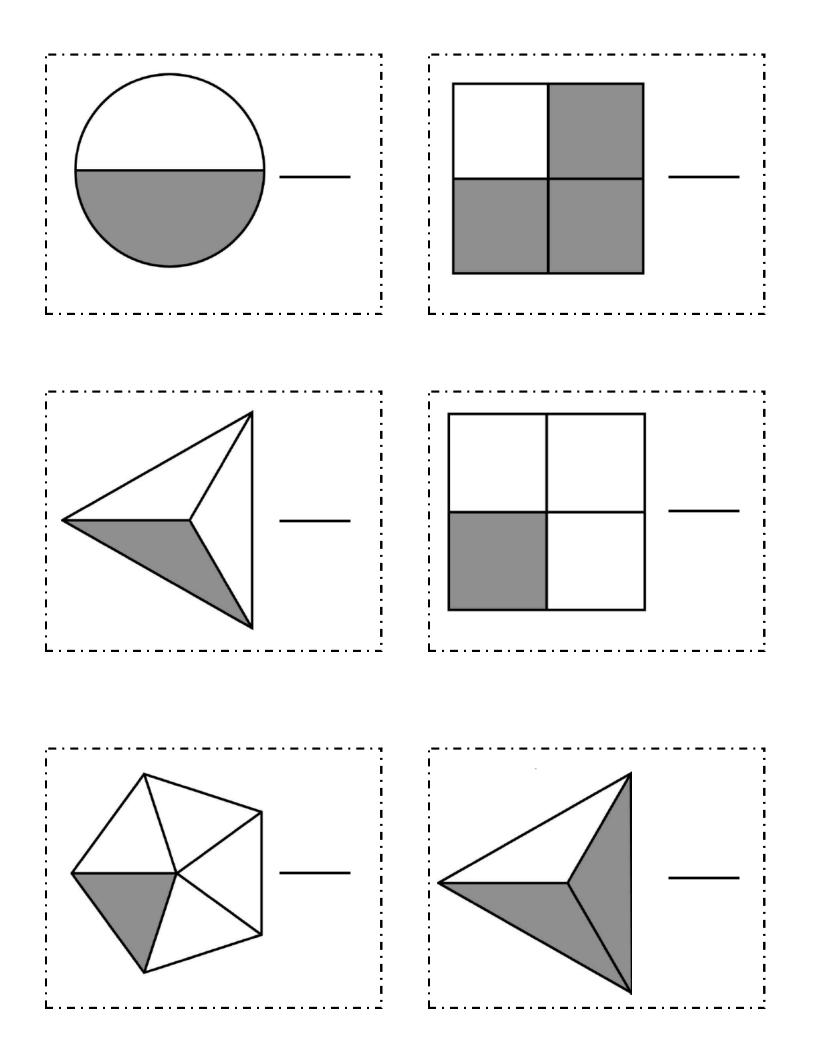
Elapsed Time Cards

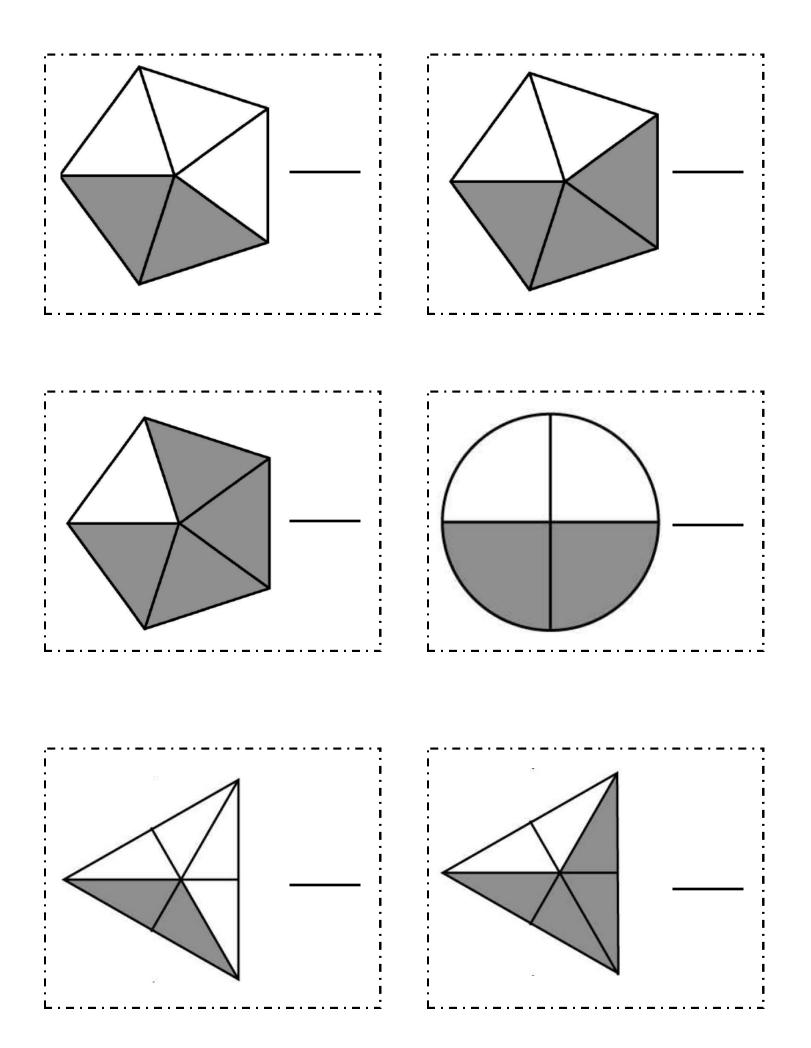
20	35	45
minutes	minutes	minutes
15	90	60
minutes	minutes	minutes
25	55	30
minutes	minutes	minutes

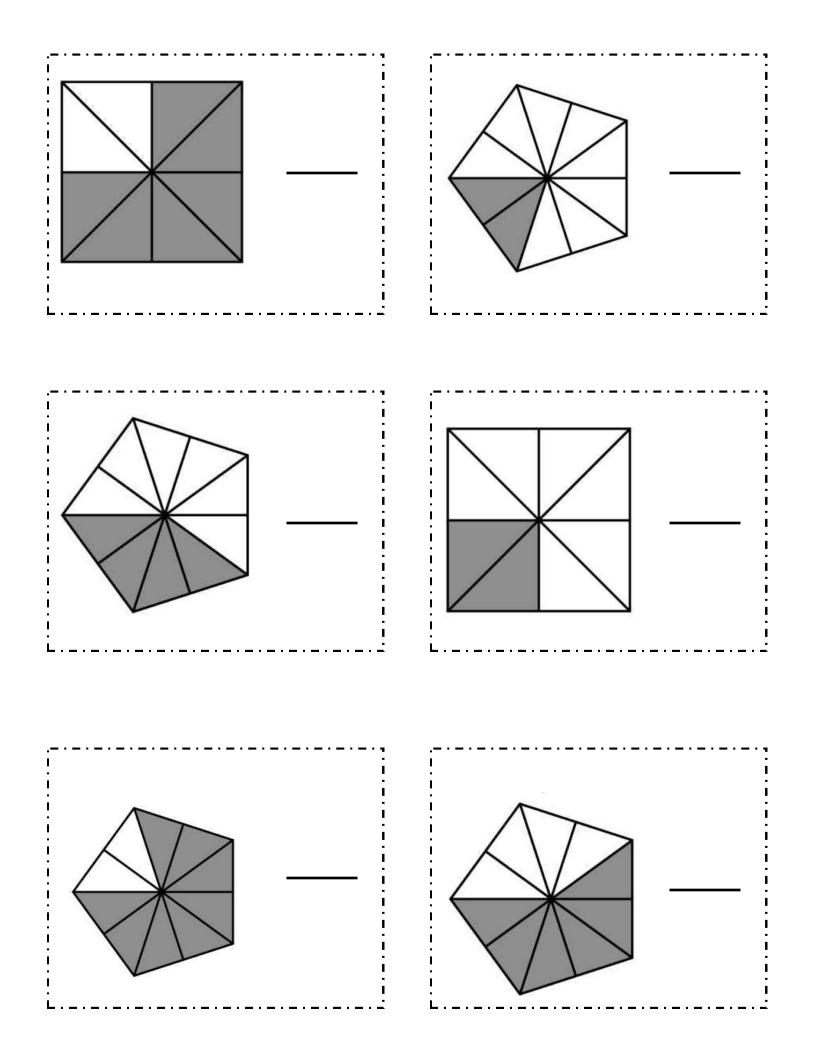


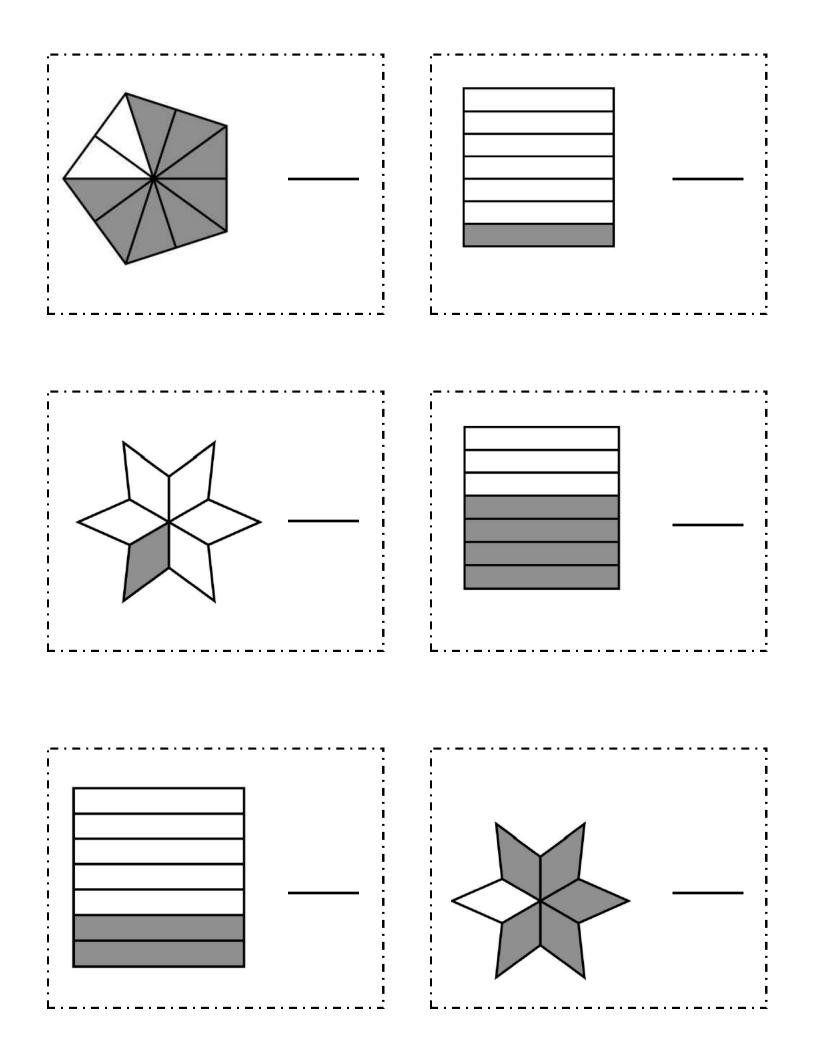
#### Directions:

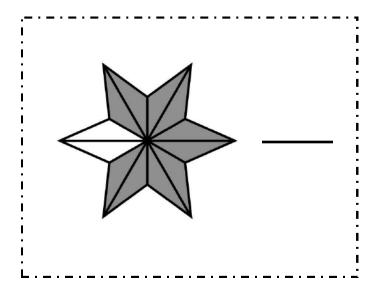
- 1. Write the fraction that matches each picture.
- 2. Cut out each card.
- 3. Match equivalent fractions.
- 4. Make a list of all equivalent fractions below.

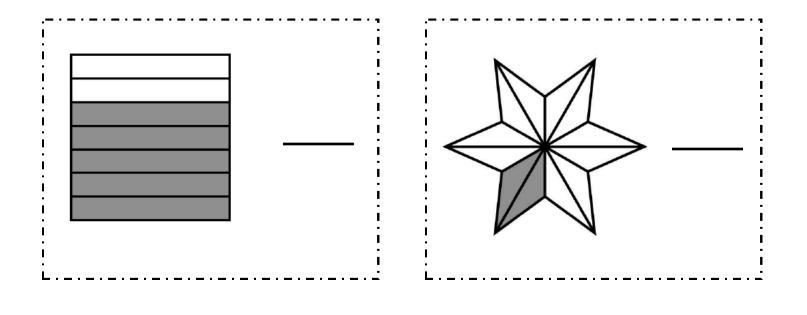


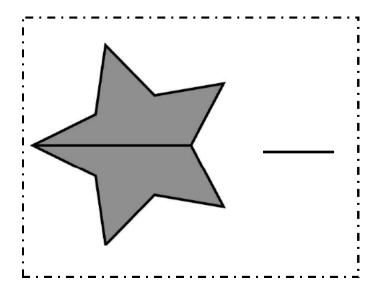


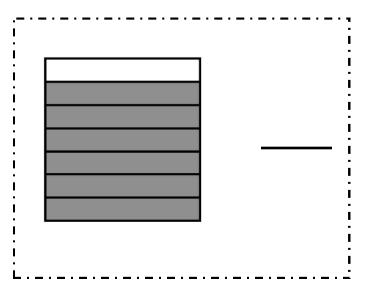












# Math Card Games



## Math War

#### Materials:

1 deck of playing cards (without face cards) for each pair of students

#### **Multiplication War**

#### Directions

One player shuffles and divides the cards equally between both players, placing the cards face down between them.

Each player turns over a card at the same time.

The first player to say the product of both of the cards wins and takes the cards.

Play continues until one player has most (or all) of the cards.

#### Variation

- One player shuffles the cards and places them face down, spreading them out between the two players.
- Both players pick two cards randomly, multiply the two factors, and say the product.
- Both players show their hands to prove their products.
- The player with the highest product takes all four cards and places them in a separate pile.
- Play continues until one player has captured all the cards.

#### Fraction War

- Each player turns over 2 cards at once and tries to make the largest fraction by laying the cards vertically. For example with a 3 and 5, you can make 3/5 or 5/3; if the other person has a 2 and 8, the fraction could be 2/8 or 8/2.
- Variations: only allow fractions less than one or use three cards at a time and create mixed numerals.





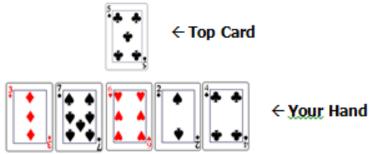
## TOP THAT!



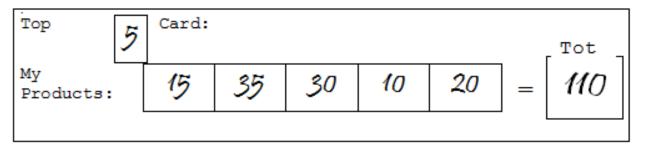
- 1. Remove the Jacks, Queens, Kings, and Aces from a deck of playing cards.
- 2. Shuffle the deck and deal five cards to each player.

 Take the next card from the deck and put it face-up on the table in front of the players. This is called the Top Card. (There will only be one Top Card for everyone to see.)

Every player must multiply each of his/her cards by the Top Card and record the products on the scoring sheet.



For example, if the Top Card is 5 and your hand is 3, 7, 6, 2, and 4, you will record 15 (3x5), 35 (7x5), 30 (6x5), 10 (2x5), 20 (4x5). The final step is to add each of the products and record the total for that hand. Your score sheet would look like this:

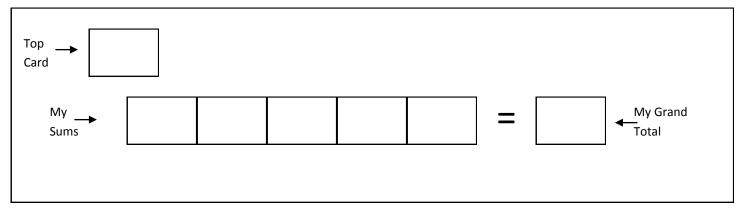


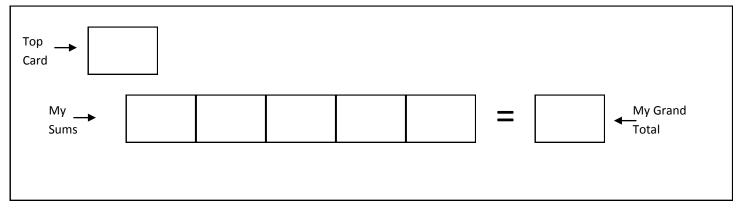
5. Share your scoring sheet with the other players- make sure everyone agrees on each product as well as the sum of those products!

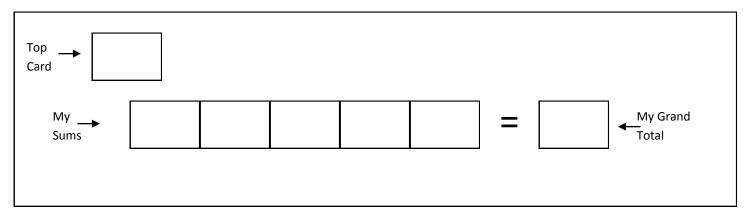
6. For the next hand, collect all of the cards, reshuffle, and repeat the above steps.

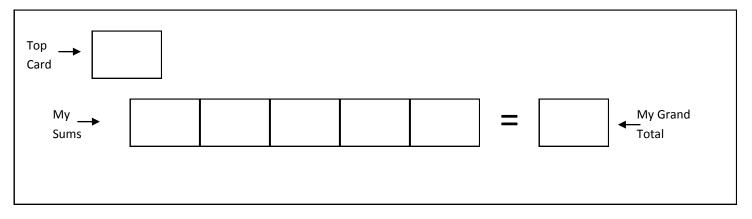
7. At the end of eight hands, add all of the totals for your Game Total. The player with the highest Game Total is the winner!











#### MAKE THE MOST OF IT:

Remove kings and jacks from the deck. Ace is one and Queen is zero. Players take turns drawing one card at a time, trying to create the largest 5 digit number possible. As each card is drawn it is placed (and cannot be moved) into the ones, tens, hundreds, thousands, or tenthousands place. When the sixth card is drawn, the player can choose one of the cards on the table to discard and replace it with the sixth card. Largest 5 digit number wins.

Make this game easier or harder by varying the number of digits.



#### <u>MAKE 100:</u>

In this game Aces are one, Queens are zero, and Kings and Jacks are wild cards. Each game has 5 rounds.

To play deal six cards to each player. Players choose any four of the cards to make two doubledigit numbers that when added come as close as possible to the total of 100. Wild cards can be assigned any value. Players record their numbers and the sums on the score sheet. The player's score for each round is the difference between the sum and 100 (for example sums of 95 and 105 both score 5 points). The used cards are discarded and the two cards remaining in each hand are kept for the next round. For rounds 2 to 5, deal out four cards to each player and make two double-digit numbers, add them, and score your points. At the end of five rounds, the player with the lowest value wins.

Scoring variation: Play is the same, but when you score use positive numbers for sums above 100 and negative numbers for score below 100. The player then adds up positive and negative numbers and the one with the grand total closest to zero after five rounds wins.

Score Sheet:

Round 1:	+	=	points
Round 2:	+	=	points
Round 3:	+	=	points
Round 4:	+	=	points
Round 5:	+	=	points



#### SALUTE:

This game helps students practice adding (or multiplying) and finding the missing addend (or factor).



This is a game for three players. Remove the face cards from a regular deck of cards (ace represents one).

Deal out the cards evenly to two players who sit facing each other; each holds the stack of cards face down.

The third player sits where s/he can see the other two players. When the third player says "Salute," the two players with cards simultaneously take the top cards off their respective piles and hold them on their foreheads with the face of the card outwards so that they can only see the other person's card.

The third player announces the sum (or product for a more advanced version) of the two cards. Each of the two players holding a card tries to be the first to announce the number on his own card (which he cannot see).

The winner takes both cards. Rotate players so everyone gets a chance to be the one who says, "salute," and gives the sum and product.

### Fraction Dominos



• At the start of the game, the dominoes are placed face down, and shuffled around. Each player selects 7 dominoes at random (or, if there are many players, just 5).

• The player with the highest 'double' plays it as the first move of the game (in fractions dominoes, the 'highest' fraction could just be the fraction closest to one, or could be the fraction with the highest denominator).

• On a player's turn, the need to match one end of one of their dominoes to a 'free end' of a domino that has already been played. A 'free end' means one that has not been matched before. (In fractions dominoes, you could allow numeral *and* circle fractions to match either numeral or circle fractions, or you could say that the numeral fraction can *only* be matched to a circle fraction, and vice versa.)

• 'Doubles' are special (that is, dominoes with both ends matching). When a player plays a double, it is placed so its *middle* lies against the matching end. Then, other dominoes can be placed against the middle of the other side, *or* against either end.

• If a player can't go, he or she must draw another domino from the pile of face-down dominoes.

The winner is the first player to finish all of his or her dominoes.

#### Printable Fraction Dominos are available for free at the web site below.

http://www.dr-mikes-math-games-for-kids.com/fractions-dominoes.html