

Target 1

Object of the Game

Players use number cards to create two decimals that have a sum as close to 1 as possible. The score for each round is the difference between a player's sum and 1. The player with the lower total score after three rounds wins.

Materials

- A deck of cards containing four each of the numbers 0 to 9
Print the cards, use a deck of playing cards (the 2-9 cards, aces for 1s and one of the face cards for 0s), or make your own cards. You can use paper, a grocery bag, or a cereal or other food box to make cards.
- Scrap paper or whiteboard to show work
- Pencil or pen
- Record sheets. Print copies of the Target 1 Record Sheet or make your own.



Target 1 Record Sheet			
Name _____		Name _____	
Round 1			
Decimals	0. ____ + 0. ____	0. ____ + 0. ____	
Sum	_____		
Score	_____		
Round 2			
Decimals	0. ____ + 0. ____	0. ____ + 0. ____	
Sum	_____		
Score	_____		

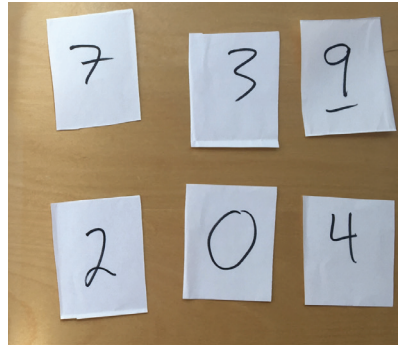
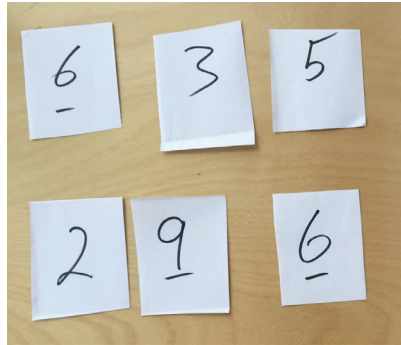
Skills

This game helps us practice:

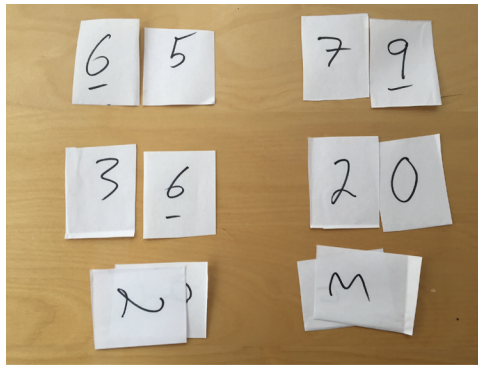
- Place value understanding: tenths, hundredths and ones (wholes)
- Estimating
- Adding decimals to the hundredths
- Finding the difference between decimals and 1

How to Play

1. Mix up the cards. Each player gets 6 cards.

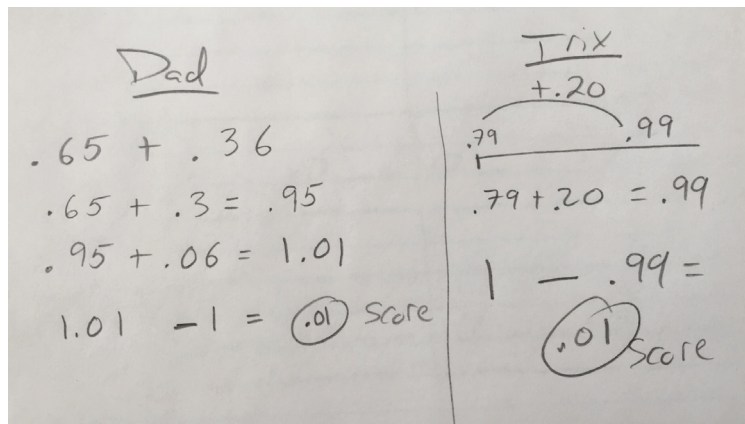


2. Each player chooses 4 of their 6 cards to make two decimal numbers to the hundredths place. The goal is to make numbers that will have a sum (the total when added) as close to 1 as possible, either less than or greater than 1.



Dad made $0.65 + 0.36$. He didn't use the 2 or the 9.
Trix made $0.79 + 0.20$. She didn't use the 3 or the 4.

3. Players add their numbers. This can be done on scratch paper or mentally.



Both players had sums that were .01 away from 1. Dad's sum was .01 greater than 1, and Trix's sum was .01 less than 1.

4. Players record their decimals, sums, and scores on the record sheet.

Target 1

	Dad	Trix
Round 1		
decimals	$0.\underline{65} + 0.\underline{36}$	$0.\underline{79} + 0.\underline{20}$
sum	$\underline{1.01}$	$\underline{0.99}$
score	.01	(.01)

5. The difference between a player's total and 1 is their score for the first round.
6. After three rounds, players add their three scores. The player with the LOWER final score wins.

Target 1

	Dad	Trix
Round 1		
decimals	$0.\underline{65} + 0.\underline{36}$	$0.\underline{79} + 0.\underline{20}$
sum	$\underline{1.01}$	$\underline{0.99}$
score	.01	(.01)
Round 2		
decimals	$0.\underline{54} + 0.\underline{67}$	$0.\underline{80} + 0.\underline{19}$
sum	$\underline{1.21}$	$\underline{0.99}$
score	.21	(.01)
Round 3		
decimals	$0.\underline{42} + 0.\underline{57}$	$0.\underline{42} + 0.\underline{58}$
sum	$\underline{0.99}$	$\underline{1.00}$
score	(.01)	(0)
Total	$.01 + .21 + .01 =$	$.01 + .01 + 0 =$
Score	.23	(.02)

Winner!

Tips for Players and Families

- Money is a good model for working with decimals to the hundredths. Rephrasing 0.73 as 73 cents may help some players.
- Take time to discuss how players decide which cards to use each round. Moving the number cards around as you think can be useful for all players.
- Students may have strategies for adding decimals, like using number lines, that adults are unfamiliar with. Ask questions if you don't understand a strategy. It's always interesting to learn something new!

Change It Up

Making even small changes to a game can invite new ways of thinking about the math. Try making one of the changes below. How did it change your strategy for winning the game?

- Take four cards each round instead of six. Players will have to use all four cards.
- Change the target to 1.5 or 2.
- Play cooperatively, working to get the smallest score as a team.
- Add four wild cards to the deck. These can represent any digit.



1	1	1
1	2	2
2	2	3



3	3	3
4	4	4
4	5	5



5

5

6

6

6

6

7

7

7



7	8	8
8	8	9
9	9	9

Target 1 Record Sheet

Name _____

Name _____

Round 1

Decimals	0. ____ ____ + 0. ____ ____	0. ____ ____ + 0. ____ ____
Sum	_____ . _____	_____ . _____
Score		

Round 2

Decimals	0. ____ ____ + 0. ____ ____	0. ____ ____ + 0. ____ ____
Sum	_____ . _____	_____ . _____
Score		

Round 3

Decimals	0. ____ ____ + 0. ____ ____	0. ____ ____ + 0. ____ ____
Sum	_____ . _____	_____ . _____
Score		

**TOTAL
SCORE**