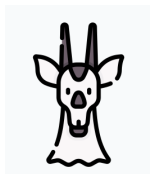




Algebra-Horse



This game practices the order of execution of operations in a mathematical expression. Try to guess which order your opponent has in mind. The game is played with three digits, and with the operators '+', '-', '*', '/'. You may also use parentheses.

A game for 2-4 players.

1. All players roll one die and whoever rolls the highest gets to start.
2. The first player rolls the die three times and writes down the three numbers in the boxes. For example 5, 4, and 2:

$$\boxed{5} \quad \boxed{4} \quad \boxed{2}$$

All players write down the numbers, **in the order they were thrown**. Use the worksheet (p. 3) or a notebook.

3. With these, numbers, **in this order**, the first player now inserts operations (+, -, * or /), and/or brackets. [Many combinations with these numbers in this order are possible, see the list on page 2)].
The other players should not see what the first player is inserting!
The first player calculates the answer. For instance, if the first player chooses "(5+4) / 2", the answer is 4½. Now, the first player tells the other players the answer, but does not yet reveal the order of operations!

$$\boxed{5} \quad \boxed{4} \quad \boxed{2} = 4 \frac{1}{2}$$

4. The other players now have 1 minute to make an arithmetically correct combination corresponding to the answer of player 1, in this case 4½. If 1 minute is too long, 30 seconds is also possible.
5. When time runs out, the solutions are compared with player 1's. Players who have not found a correct sequence of operations before time runs out are penalized with one letter of the word **Horse**.
Note: there can be more than 1 correct solution with the same answer - any arithmetically correct number phrase with an appropriate answer is good.
6. Repeat steps 2 to 6 with each player taking turns being the "leader" while the others try to follow.
7. If **Horse** is completely spelled out, then that player is eliminated. Continue until there is a winner.



All possibilities with 5, 4 en 2.

Variant	Num 1	Operator	Num 2	Operator	Num 3	Operator	Answ
1	5	+	4	+	2	=	11
2	5	+	4	-	2	=	7
3	5	+	4	*	2	=	13
4	(5	+	4)	*	2	=	18
5	5	+	4	/	2	=	7
6	(5	+	4)	/	2	=	$4\frac{1}{2}$
7	5	-	4	+	2	=	3
8	5	-	(4	+	2)	=	-1
9	5	-	4	-	2	=	-1
10	5	-	(4	-	2)	=	3
11	5	-	4	*	2	=	-3
12	(5	-	4)	*	2	=	2
13	5	-	4	/	2	=	3
14	(5	-	4)	/	2	=	$\frac{1}{2}$
15	5	*	4	+	2	=	22
16	5	*	(4	+	2)	=	30
17	5	*	4	-	2	=	18
18	5	*	(4	-	2)	=	10
19	5	*	4	*	2	=	40
20	5	*	4	/	2	=	10
21	5	/	4	+	2	=	$3\frac{1}{4}$
22	5	/	(4	+	2)	=	$\frac{5}{6}$
23	5	/	4	-	2	=	$-\frac{3}{4}$
24	5	/	(4	-	2)	=	$2\frac{1}{2}$
25	5	/	4	*	2	=	$2\frac{1}{2}$
26	5	/	(4	*	2)	=	$\frac{5}{8}$
27	5	/	4	/	2	=	$\frac{5}{8}$
28	5	/	(4	/	2)	=	$2\frac{1}{2}$



Worksheet Algebra-Horse

You can also make your own notes.

Num 1	Num 2	Num 3	Answ

Num 1	Num 2	Num 3	Answ