

the Price is right



Host: "Walter, come on down! You'll be our fourth and final player on The Price is Right!"

Game One: One Bid

Host: "Today's first item will bring music to your ears. Yes, it's a top-of-the-range television and speakers!"

"To win that amazing prize, you've just got to **sum up** their cost without going a penny over!"

TELE + SPEAKERS = ???

۸DT		47
ARI	=	4/

ELKS = 75

KETTLES = 122

LEEKS = 84

PLATES = 116

STAPLER = 129

STEAK = 89

TREES = 75

Game Two: Hole in One (or Two)

Host: "This is your chance to win a brand new car, Walter."

Make a hole in some cells so that each row and column contains exactly one hole.

The region marked by '2' in the lower left must have exactly two holes in it. All other regions must contain exactly one hole.

Adjacent cells or cells that share a corner cannot both contain holes.

"So Walter, reading top to bottom, can you figure out the 5-digit price of the car?"

0	0	1	0	1
1	0	0	1	0
0	1	0	1	1
0	1	0	0	1
21	1	0	1	0

Game Three: Showcase Showdown

Host: "Walter, congratulations on making it through the first two rounds. For the viewers at home let's remind them of what you've done so far...

In One Bid (outer ring), you **turn**ed an extraordin**ary** guess into the television /speaker set, and in Hole in One (or Two) (inner ring), you poked through the **right** holes and avoided the **wrong** ones to win the car.

Let's see if the **answers from your first two games** can set the wheel up to win you tonight's jackpot of £100,000!

Now, all you've got to do to win the money is score more points in total than our other finalists: Heather, Karen, and Helen.

Unluckily for you, the wheel has been playing up since we upgraded to a completely digital system..."

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the PRICE IS RIGHT

"Every time the wheel is spun, it seems to give an incorrect output that could not belong to our original wheel (see right).

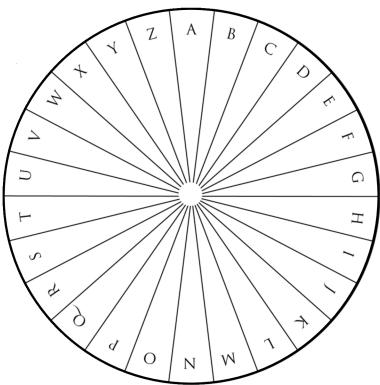
The producers have figured out that each incorrect output can be modified in three possible ways (see below) to change it to the intended output. They have also learned that at the end of each turn, the inner wheel gets rotated clockwise by the sum of the modifier numbers (#Xs) that were applied that turn.

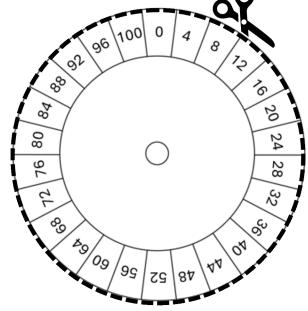
Assuming that each modifier is applied no more than once on each turn, we think it should be possible to figure out which modifiers get us to the intended outputs... but our producers haven't had time to edit the code to make this process automatic. I hope you'll be able to figure it out, Walter."

Modifier Examples

#1: $36 \rightarrow 34, 49 \rightarrow 47$ **#2:** 38 → 11, 78 → 15 **#3:** $5 \rightarrow 10, 20 \rightarrow 40$

Incorrect Output	Number of Modifiers Applied	Intended Output	Extracted Letter	Modifiers Applied	Rotation Amount At End of Turn
62	2			#1 #2 #3	
32	2			#1 #2 #3	
9999	1			#1 #2 #3	
9992	3			#1 #2 #3	
86	1			#1 #2 #3	
27	2			#1 #2 #3	
992	2			#1 #2 #3	
53	1			#1 #2 #3	
54	1			#1 #2 #3	





Host: "Congratulations on coping with our problematic wheel and more importantly winning tonight's jackpot! There's just one thing left that we need from you to secure your prize..."