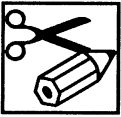


The Costly Calculations Game Show

Leader



Practice estimation using number facts, planning ahead, and breaking a problem into smaller parts.



You will need:

- Calculators
- Pencil and paper
- Costly calculations Record Sheet



Do this:

- Review the following situation:

Imagine that auditions are being held for a new game show in which contestants, in teams, use their skills with special calculators to win prize money. These special calculators are somewhat like our regular calculators, but most of the numbers are missing. Actually the only number keys on these calculators are 2 and 6.

The game show hostess, Donna Cash (better known as DC), will pay \$1.00 for every key pressed by contestants who follow the show's rules. These are the rules:

1. You may use only these keys: $\boxed{2}$, $\boxed{6}$, $\boxed{+}$, $\boxed{-}$, $\boxed{\times}$, $\boxed{\div}$, $\boxed{=}$
2. Get each of the Gameboard Numbers (12, 30, 19, 13, 110, 6.2) on your calculator display, using as many ways as possible.

But You must use only the keys shown in #1 above. You must use no more than ten key presses (or keystrokes) for each way you get one of the gameboard numbers.

3. To collect your payment, you must write down your keystrokes and get the answer on your calculator display.



Remember, use as many keystrokes as you can to get each answer—but not more than ten keystrokes. Use the Costly Calculations Practice Sheet to help you get ready for the game show's audition.



Study the example on the practice sheet before you begin. Also, try Game II when you have completed Game I.



Adapted from:

Stenmark, J., V. Thompson, and R. Cossey. *Family Math*. Regents, University of CA, 1986:240-242.

The Costly Calculations Game Show

Student _____



Do this:

- Use only these keys:

2 , 6 , $+$, $-$, \times , \div , $=$

- Get each of the following numbers on your calculator display:
12, 30, 19, 13, 110, 6.2
- Make them appear on the display in as many ways as you can, but do not use more than **ten keystrokes** for any way.
- If you earned \$1.00 for each key stroke, how much money could you make:

Example:

$2 \times 2 \times 6 + 2 \div 2 =$

is a \$10 solution for 13.

RECORD SHEET

Number	Keystrokes	Earnings
12		
30		
19		
13		
110		
6.2		



WHAT I FOUND