

Double Rules

You need two calculators

a classmate

Activity

Rāwiri challenges Harmony to work out what rules he has entered into his two calculators.

He starts by hiding two calculators behind a big book.

He puts a multiplying rule into the first calculator ...

and puts an adding or subtracting rule into the second calculator.

He asks Harmony to give him some “in” numbers.

Put **6** into the first calculator. Press **=**. That gives 12.

Put **12 =** into the second calculator. That gives ... 15.

15 out.

Try 6.

I'll key in **2 x =** so that it doubles every number.

On this calculator, I'll put in **3 + =** so that it adds 3 to every number.

6 goes in, and 15 comes out. Hmm ...

Harmony tries to find out what rules Rāwiri has put into his calculators by asking several more “in” numbers.

- If she gets Rāwiri to put in these numbers, what numbers will come out?
 - 2
 - 10
 - 3
 - 4
- Discuss with a classmate how Harmony could work out the rules that are in Rāwiri's calculators.