

Finding Rules for Sharing Machines

NCTM Standards 1, 2, 6, 7, 9, 10

Sharing Machine A shares objects equally between two people. Complete the table.

	Contents of Each Input Package	Number of Packages That Come Out	Contents of Each Output Package
1	12 cookies	2	6 cookies
2	8 dimes	2	
3	_____erasers		11 erasers
4			9 carrots
5	14 plums		

- 6 Write a division sentence to show what the machine will do with 14 plums.

$$\square \div \square = \square$$

Sharing Machine B shares objects equally among three people. Complete the table.

	Contents of Each Input Package	Number of Packages That Come Out	Contents of Each Output Package
7	_____ cookies	3	6 cookies
8	33 bananas	3	
9			8 crayons
10	27 toy trucks		

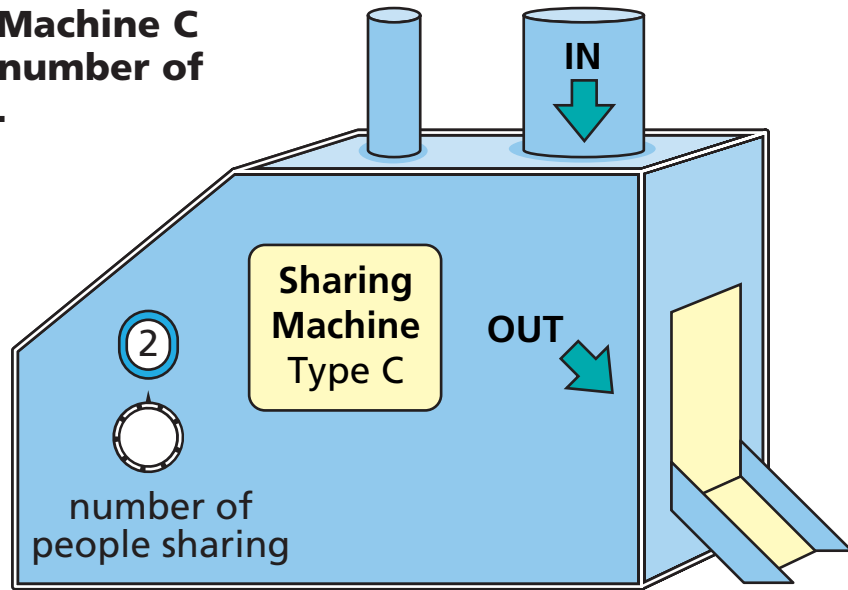
- 11 Write a division sentence to show what the machine will do with 27 toy trucks.

$$\square \div \square = \square$$

Numa opened a package and there were 7 marbles inside.

- 12 If the package came from machine A, how many marbles had been put in? _____ marbles
- 13 If the package came from machine B, how many marbles had been put in? _____ marbles

The setting for Sharing Machine C can be changed for the number of people who are sharing. Complete the table.



	Contents of Each Input Package	Number of Packages That Come Out	Contents of Each Output Package
14	12 prizes	2	6 prizes
15	_____ marbles	3	6 marbles
16	16 apples		8 apples
17	_____ video games	4	4 video games
18	_____ pickles	25	3 pickles
19	88 stickers	8	
20	Challenge 42 toys		2 toys