



TIMO practice: Ways to share sweets (with solutions)

8 problems · Grade 1, 2 · answers and solutions at the end

Name _____

Date _____



Practise this type in the Karotto app, with questions read aloud and hints when stuck. Scan the code or visit playkarotto.com

Grade 1

- 1 Share 8 candies between the fox and the frog. One of them may get none. How many ways are there?



Answer: _____

- 2 Split 10 into two numbers that add up to it, with no zeros. Swapping the two numbers counts as the same way. How many ways are there?



Answer: _____

- 3 Split 7 into two numbers that add up to it, with no zeros. Swapping the two numbers counts as the same way. How many ways are there?



Answer: _____

- 4 Split 9 into two numbers that add up to it, with no zeros. Swapping the two numbers counts as the same way. How many ways are there?



Answer: _____

Grade 2

- 5 Split 8 into two numbers that add up to it, and 0 is allowed. Swapping the two numbers counts as the same way. How many ways are there?



Answer: _____

- 6 Split 6 into two numbers that add up to it, and 0 is allowed. Swapping the two numbers counts as the same way. How many ways are there?



Answer: _____

- 7 Put 9 identical flowers into 3 different vases, with at least 1 flower in every vase. How many ways are there?



Answer: _____

- 8 Split 10 into two numbers that add up to it, and 0 is allowed. Swapping the two numbers counts as the same way. How many ways are there?



Answer: _____

Answers and solutions: Ways to share sweets

1. Answer: 9 · Grade 1

How to think: Count by how many candies the fox gets: 0, 1, 2, and so on.

Solution: The fox can get from 0 to 8 candies, and each number is one way: 9 ways.

2. Answer: 5 · Grade 1

How to think: List them in order: the first number is 1, then 2, then 3. Stop when the pairs start to repeat.

Solution: The ways are: 1 plus 9, 2 plus 8, 3 plus 7, 4 plus 6, 5 plus 5. That makes 5 ways.

3. Answer: 3 · Grade 1

How to think: List them in order: the first number is 1, then 2, then 3. Stop when the pairs start to repeat.

Solution: The ways are: 1 plus 6, 2 plus 5, 3 plus 4. That makes 3 ways.

4. Answer: 4 · Grade 1

How to think: List them in order: the first number is 1, then 2, then 3. Stop when the pairs start to repeat.

Solution: The ways are: 1 plus 8, 2 plus 7, 3 plus 6, 4 plus 5. That makes 4 ways.

5. Answer: 5 · Grade 2

How to think: List them in order: the first number is 0, then 1, then 2. Stop when the pairs start to repeat.

Solution: The ways are: 0 plus 8, 1 plus 7, 2 plus 6, 3 plus 5, 4 plus 4. That makes 5 ways.

6. Answer: 4 · Grade 2

How to think: List them in order: the first number is 0, then 1, then 2. Stop when the pairs start to repeat.

Solution: The ways are: 0 plus 6, 1 plus 5, 2 plus 4, 3 plus 3. That makes 4 ways.

7. Answer: 28 · Grade 2

How to think: Count by the number of flowers in the first vase. Each time, share the rest between the other two vases.

Solution: First vase with 1 flower: 7 ways, with 2 flowers: 6 ways, one fewer each time. Add them up: 7 plus 6 plus 5 plus 4 plus 3 plus 2 plus 1 equals 28 ways.

8. Answer: 6 · Grade 2

How to think: List them in order: the first number is 0, then 1, then 2. Stop when the pairs start to repeat.

Solution: The ways are: 0 plus 10, 1 plus 9, 2 plus 8, 3 plus 7, 4 plus 6, 5 plus 5. That makes 6 ways.
