How many ways can you make 1000 using only eight 8s?

Investigation Brief:

Write an equation that equals 1000 using only the digit 8, eight times. You can use any operations you want, or symbols like brackets, decimal points, and fractions.

How many different equations that equal 1000 can you write?

This investigation requires you to think about the four operations and how to combine them to create a particular result.

Record your thinking and observations as well as your solutions.

Resources:

- calculator

Prompts and Suggestions

Remember the order of operations. You can use brackets to show what part of your equation gets done first.

Would exponents or decimal fractions be

Is possible to do this with only 1 operation?

Is it possible using all 4 operations in one

If you are having trouble getting started, try making a list of numbers you can make using fewer than eight 8s. For example, you can make 1 by using 8/8, or you can make 2 by using (8+8)/8.

Images and Links