### Identification type of numbers

**ARITHMETIC**

10

### **Mersenne primes**

Mersenne prime numbers are prime numbers that result from subtracting 1 from a power of 2;

*Mn* = 2*n* – 1

A number, *Mn*, is a Mersenne Prime if it meets the following three conditions:

* It is a Mersenne number, that is, *Mn* = 2*n* – 1.
* *Mn*  is a prime number
* *n*  is a prime number

What is the largest number of Mersenne that can be obtained in the calculator with all its figures in view?

**1**

Note: Remember that a number in scientific notation only shows a few significant figures in its decimal part, so it is not convenient in this activity.

Are *M*7 and *M*11 Mersene prime numbers?

**2**

What is the largest Mersenne prime number that can be obtained in the calculator with all its figures in sight?

**3**

How many digits does Mersenne's last prime number, *M*74,207,281 have? It was discovered in January 2016. It is the 49th (forty-ninth) Mersenne prime number

**4**

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