

**NAME**

openssl-prime, prime – compute prime numbers

**SYNOPSIS**

**openssl prime** [**-help**] [**-hex**] [**-generate**] [**-bits**] [**-safe**] [**-checks**] [*number...*]

**DESCRIPTION**

The **prime** command checks if the specified numbers are prime.

If no numbers are given on the command line, the **-generate** flag should be used to generate primes according to the requirements specified by the rest of the flags.

**OPTIONS**

**[-help]**

Display an option summary.

**[-hex]**

Generate hex output.

**[-generate]**

Generate a prime number.

**[-bits num]**

Generate a prime with **num** bits.

**[-safe]**

When used with **-generate**, generates a “safe” prime. If the number generated is **n**, then check that **(n-1)/2** is also prime.

**[-checks num]**

Perform the checks **num** times to see that the generated number is prime. The default is 20.

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