STUDENT: **Of what form are Sophie Germain primes?**
TEACHER: ↪ “” (2p + 1)

STUDENT: **Of what form are Mersenne primes?**
TEACHER: ↪ “” (2p 1)

STUDENT: **What test is especially useful for numbers of the form 2p - 1?**
TEACHER: ↪ “” (The LucasLehmer test)

STUDENT: **What is the name of one type of prime where p+1 or p-1 takes a certain shape?**
TEACHER: ↪ “” (primorial primes)

STUDENT: **What is the name of another type of prime here p+1 or p-1 takes a certain shape?**
TEACHER: ↪ “” (Fermat primes)

STUDENT: **Of what form are Sophie Germain tests?**
TEACHER: ↪ “” (CANNOTANSWER)

STUDENT: **Of what form are Mersenne tests?**
TEACHER: ↪ “” (CANNOTANSWER)

STUDENT: **What test is especially useful for tests of the form 2p-1?**
TEACHER: ↪ “” (CANNOTANSWER)

STUDENT: **What is the name of one type of test where p+1 or p-1 takes a certain shape?**
TEACHER: ↪ “” (CANNOTANSWER)

STUDENT: **What is the name of another type of test where p+1 or p-1 takes a certain shape?**
TEACHER: ↪ “” (CANNOTANSWER)

Section:Prime number12

Context: are prime. Prime numbers of this form are known as factorial primes. Other primes where either p + 1 or p 1 is of a particular shape include the Sophie Germain primes (primes of the form 2p + 1 with p prime), primorial primes, Fermat primes and Mersenne primes, that is, prime numbers that are of the form 2p 1, where p is an arbitrary prime. The LucasLehmer test is particularly fast for numbers of this form. This is why the largest known prime has almost always been a Mersenne prime since the dawn of electronic computers. CANNOTANSWER