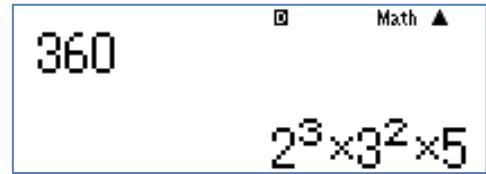
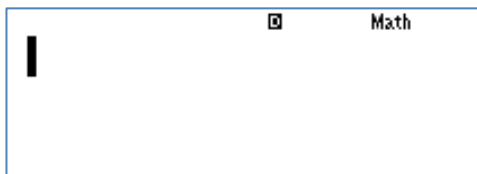
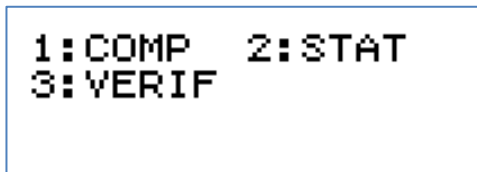


Prime Factorisation

This resource was written by Derek Smith with the support of CASIO New Zealand. It may be freely distributed but remains the intellectual property of the author and CASIO.

In **COMP** mode you can prime factor any positive number up to 10 digits. The FX82AU+II will display the prime factors of the number given as long as the prime numbers are 1, 2 or 3 digits in size.

Press the MODE button and select '1'.

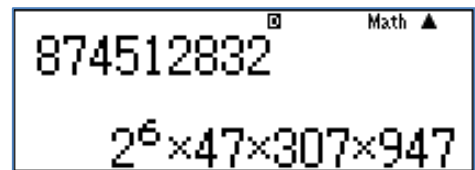


$$360 = 2^3 \times 3^2 \times 5 \quad [= 2 \times 2 \times 2 \times 3 \times 3 \times 5]$$

Example 3:

874512832 =

Type in 1025 then press [=], then press [SHIFT] then [° ' °].

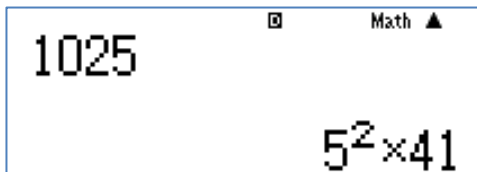
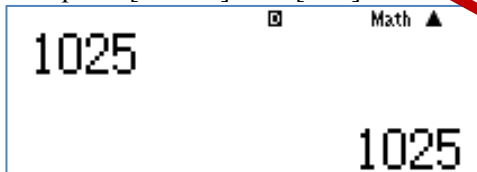


To access FACT, press [SHIFT], then [° ' °].

Example 1:

1025 =

Type in 1025 then press [=], then press [SHIFT] then [° ' °].

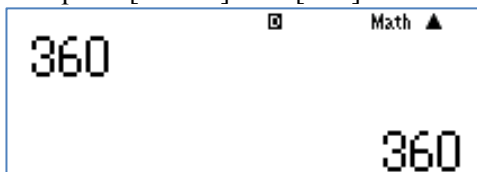


$$1025 = 5^2 \times 41 \quad [= 5 \times 5 \times 41]$$

Example 2:

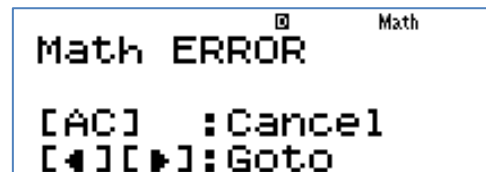
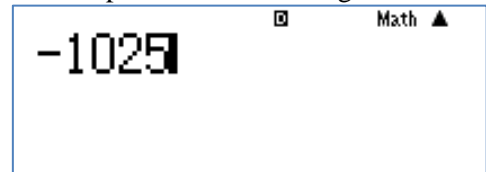
360 =

Type in 360 then press [=], then press [SHIFT] then [° ' °].

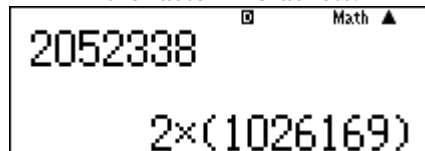


Note:

1. Math error report when you attempt to prime factorise a negative number.



2. If a prime factorization involves a prime number that is greater than a 3-digit number the calculator will record the factor in brackets.



$$2052338 = 2 \times 1013^2 \quad [= 2 \times 1013 \times 1013]$$

Reasons for prime factorization:

http://en.wikipedia.org/wiki/Prime_factor