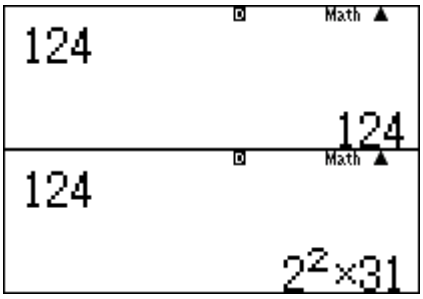
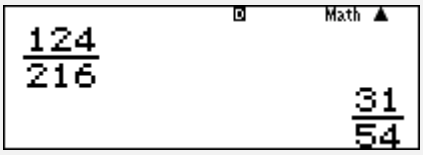
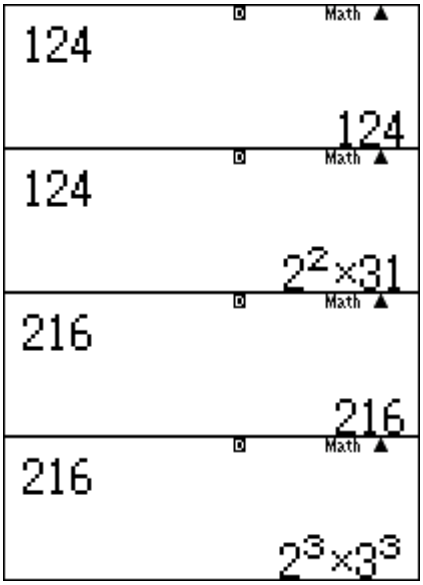
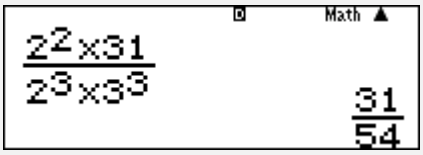
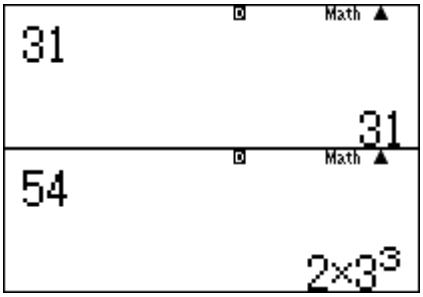
Module : Rational Numbers

Part B – Integer division and prime factorization

The calculator Can be used to find prime factors to understand integer division. To find the prime factorization of any number enter the number and press 1 2 4 =. To see it factored press ALPHA ,,,, (FACT)	
To help you understand how prime factorization works, enter the following into the calculator. 1 2 4 ▭ 2 1 6 =	
Examine this as a factored numerator and factored denominator. Factor each separately first. 1 2 4 = SHIFT ,,,, (FACT) 2 1 6 = SHIFT ,,,, (FACT)	

Enter the factored forms into the calculator as a fractions. [2] [x^2] [×] [3] [1] [▼] [2] [$x^{\square}$] [3] [▶] [×] [3] [$x^{\square}$] [3] [=]	
Factor the new numerator and denominator and see what factors divided out. [3] [1] [=] [SHIFT] [,,,] (FACT) [5] [4] [=] [SHIFT] [,,,] (FACT)	
This is another way to see the same expression. [2] [x^2] [×] [3] [1] [▼] [2] [x^2] [×] [2] [$x^{\square}$] [1] [▶] [×] [2] [7] [=]