galois

Solutions to the exercises

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Exercise 1: 2
Exercise 2: 208539793
Exercise 3: :t x is x:[6], :t y is y : \{n\} (n >= 5, fin n) => [n]
           :t x+y is (x+y) : [6]
Exercise 4: : safe is applied to an expression to determine whether it will encounter a
            run-time error. Simple use:
              Cryptol> :safe 1:[34]
               Safe
               (Total Elapsed Time: 0.010s, using "Z3")
Exercise 5: let x=1276439805:[32]
           complement x = 0b10110011111010110001001100000010 = 3018527490
Exercise 6: (ratio 1 2)/.(ratio 2 3)/.(ratio 3 4)/.(ratio 4 5)
           is (ratio 5 4)
Exercise 7: foldl (/.) (ratio 1 2) [(ratio 2 3), (ratio 3 4), (ratio 4 5)]
Exercise 8: (((*) 2) 4) is 8, (((*) 2) 8) is 16 and so on
Exercise 9: map ((*) 2) [3,67,22,43,12,16]
Exercise 10: split [1,2,3,4,5,6,7,8]:[4][2][16]
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