

## Three Problems

- (a) How many factors does the number 60 have?
  
  
  
  
  
  
  
  
  
  
  - (b) Find a positive integer that has 2 prime factors and a total of 15 factors.
  
2. Write down three consecutive integers  $a, b, c$ . Compare  $a \times c$  with  $b$ . Repeat several times. Explain.
  
  
  
  
  
  
  
  
  
  
3. Guess a rule for the maximum number of regions you can divide the plane into with  $n$  lines.