## *Computer Science and Mathematics* Summer term 2013

## Exercises 2

1. How many circles (with no edges appearing more than one time in it) are contained in this graph?



- 2. List all bipartite graphs with each of the two constituting vertex sets having 2 elements.
- 3. List all functions of the set { a; b; c } into itself. Which of them are bijective?
- 4. Which of the following functions  $f: \mathbb{R} \to \mathbb{R}$  are bijective?
  - f(x) = 1 f(x) = 2x  $f(x) = x^{2}$   $f(x) = 2^{x}$  $f(x) = x^{3}$