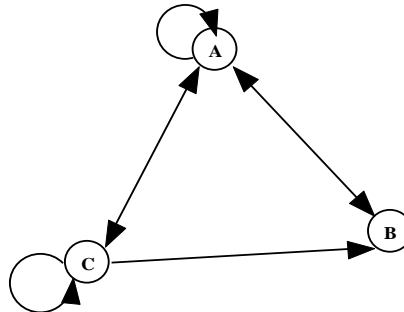考号/Exam Code: _____   姓名/Name:_____   学校/School:_____

---

1. Graph Theory

How many paths of length 3 are there in the directed graph at the right?

1.

---

2. Graph Theory

How many cycles are there from A in the directed graph at the right?

2.

---

3. Digital Electronics

Translate the digital circuit into the Boolean expression it represents. Do not simplify.

3.

---

4. Digital Electronics

How many ordered triples make the digital circuit TRUE?

4.

5. Assembly Language

What is output after this program is executed?

```
A    DC     36
LOAD     A
DIV       = 10
STORE    B
MULT     = 10
STORE    C
LOAD     A
SUB      C
STORE    D
MULT     = 10
ADD      B
STORE    E
SUB      A
DIV      = 9
STORE    G
PRINT    G
END
```

5.

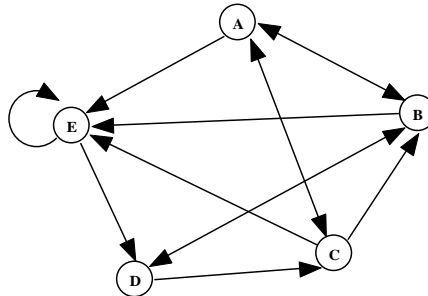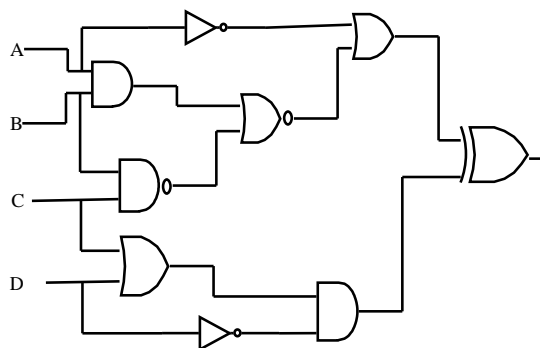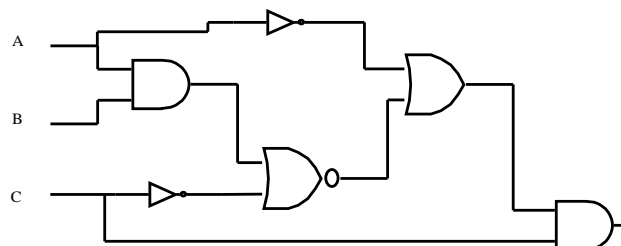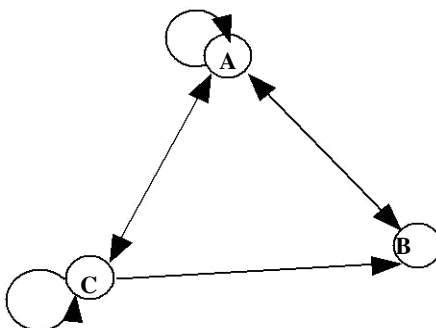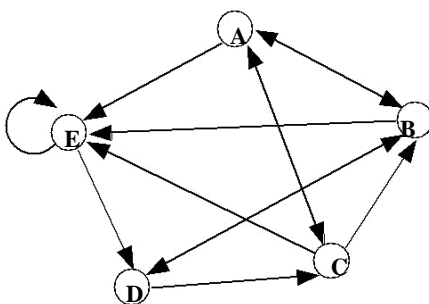考号/Exam Code: _____   姓名/Name:_____   学校/School:_____

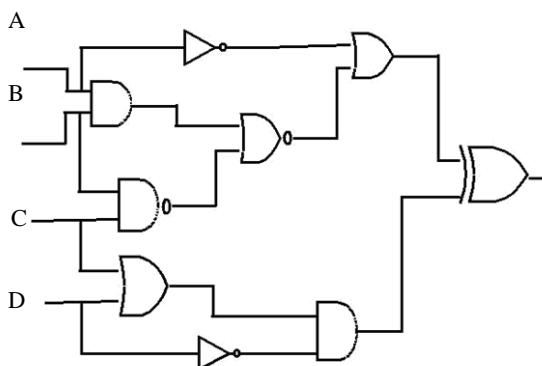## 1. Graph Theory

在右边的有向图中，有多少条
长度为 3 的路径？

1.

2. Graph Theory

在右边的有向图中，从 A
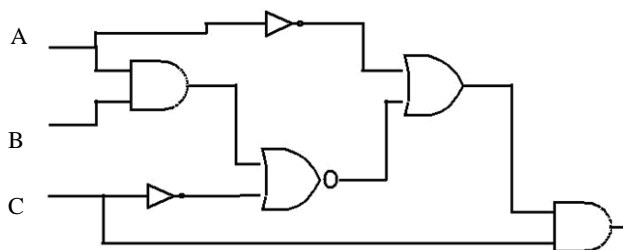开始的循环有多少个？

2.

3. Digital Electronics

将数字电路转换成其等效布
尔表达式。不要简化。

3.

4. Digital Electronics

有多少有序三元组使
右边的数字电路为真？

4.

5. Assembly Language

5.

执行此程序后，输出是什么？

```
A DC      36
LOAD      A
DIV       = 10
STORE     B
MULT      = 10
STORE     C
LOAD      A
SUB       C
STORE     D
MULT      = 10
ADD       B
STORE     E
SUB       A
DIV       = 9
STORE     G
PRINT     G
END
```