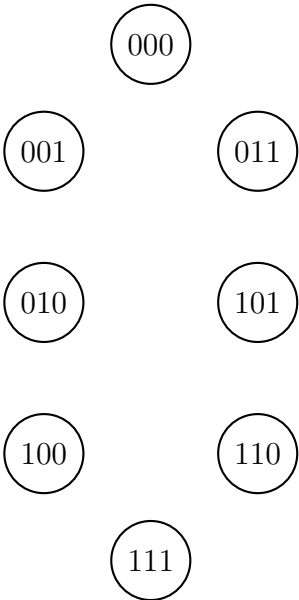


Problem 1 (R.1)

a) Please draw your arrows between the names provided. Please keep your work within this section even though there is no box surrounding it.



b)

S = {

Problem 2 (R.2)

a)

b)

c)

d)  
 $\langle F, B, E, B \rangle$ :

Explanation:

- ☐ Walk
- ☐ Path
- ☐ Circuit
- ☐ Cycle

$\langle A, E, B, D, A \rangle$ :

Explanation:

- ☐ Walk
- ☐ Path
- ☐ Circuit
- ☐ Cycle

$\langle A, A, E, B, D, A \rangle$ :  
Explanation:

- ☐ Walk
- ☐ Path
- ☐ Circuit
- ☐ Cycle

$\langle D \rangle$ :  
Explanation:

- ☐ Walk
- ☐ Path
- ☐ Circuit
- ☐ Cycle

$\langle F, E, B, E \rangle$ :

Explanation:

- ☐ Walk
- ☐ Path
- ☐ Circuit
- ☐ Cycle

### Problem 3 (R.3)

a)

Explanation:

- ☐ Reflexive
- ☐ Anti-Reflexive
- ☐ Symmetric
- ☐ Anti-Symmetric
- ☐ Transitive

b)

Explanation:

- ☐ Reflexive
- ☐ Anti-Reflexive
- ☐ Symmetric
- ☐ Anti-Symmetric
- ☐ Transitive

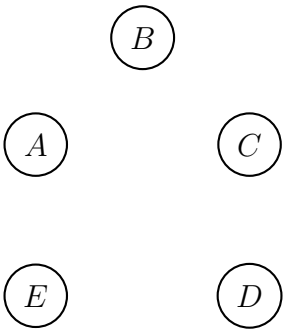
c)

Explanation:

- ☐ Reflexive
- ☐ Anti-Reflexive
- ☐ Symmetric
- ☐ Anti-Symmetric
- ☐ Transitive

Problem 4.1 (R.4)

$F \circ G$ :



Explanation:

## Problem 4.2 (R.4)

a)

☐

b)

☐

c)

☐

d)

☐

Explanation (Not required, but putting an explanation may help you need to request a regrade):