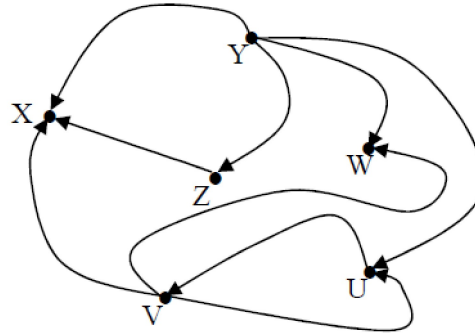


Section 06-02 - Sample Quiz - Graph Definitions

Multiple Choice

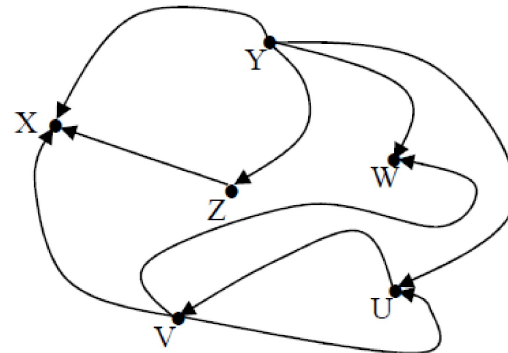
Identify the choice that best completes the statement or answers the question.

- _____ 1. What is the **OUTDEGREE** of Vertex V?



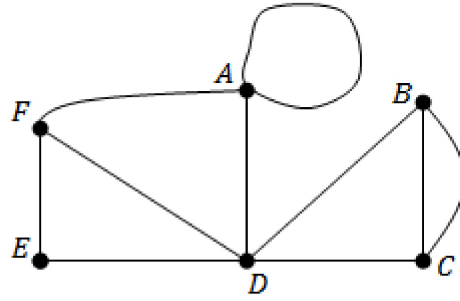
- a. 0
- b. 1
- c. 3
- d. 4

- _____ 2. Which vertex listed below could be described as a **TRANSMITTER**?



- a. V
- b. X
- c. Y
- d. U

3. What is the correct adjacency matrix for the graph shown?



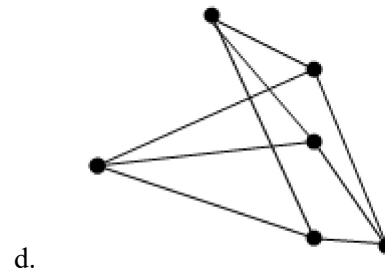
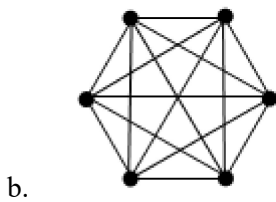
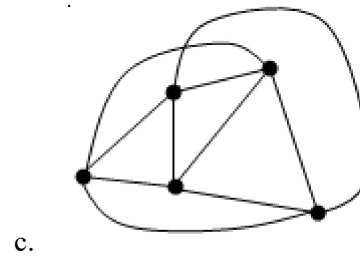
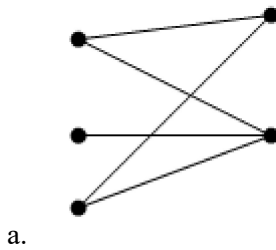
a.
$$\begin{matrix} & A & B & C & D & E & F \\ \begin{matrix} A \\ B \\ C \\ D \\ E \\ F \end{matrix} & \begin{pmatrix} 1 & 0 & 0 & 1 & 0 & 1 \\ 0 & 0 & 2 & 1 & 0 & 0 \\ 0 & 2 & 0 & 1 & 0 & 0 \\ 1 & 1 & 1 & 0 & 1 & 1 \\ 0 & 0 & 0 & 1 & 0 & 1 \\ 1 & 0 & 0 & 1 & 1 & 0 \end{pmatrix} \end{matrix}$$

c.
$$\begin{matrix} & A & B & C & D & E & F \\ \begin{matrix} A \\ B \\ C \\ D \\ E \\ F \end{matrix} & \begin{pmatrix} 2 & 0 & 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 1 & 0 & 0 \\ 0 & 1 & 0 & 1 & 0 & 0 \\ 1 & 1 & 1 & 0 & 1 & 1 \\ 0 & 0 & 0 & 1 & 0 & 1 \\ 1 & 0 & 0 & 1 & 1 & 0 \end{pmatrix} \end{matrix}$$

b.
$$\begin{matrix} & A & B & C & D & E & F \\ \begin{matrix} A \\ B \\ C \\ D \\ E \\ F \end{matrix} & \begin{pmatrix} 2 & 0 & 0 & 1 & 0 & 1 \\ 0 & 0 & 2 & 1 & 0 & 0 \\ 0 & 2 & 0 & 1 & 0 & 0 \\ 1 & 1 & 1 & 0 & 1 & 1 \\ 0 & 0 & 0 & 1 & 0 & 1 \\ 1 & 0 & 0 & 1 & 1 & 0 \end{pmatrix} \end{matrix}$$

d. None of the Above

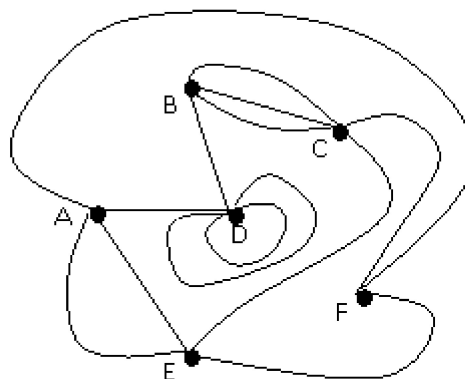
4. Which graph represents a K_6 graph?



Name: _____

ID: A

5. What is the DEGREE of Vertex D?



- a. 0
- b. 3

- c. 5
- d. 6