## NAME

**Module 20** Solving Problems Using Probability,

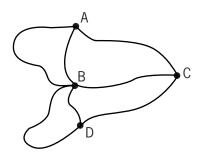
Statistics, and Discrete Math

**Lesson 4** Solving Discrete Mathematics Problems



## Set 1

Use the following graph for Questions 1 and 2. The graph represents the trails in a park.



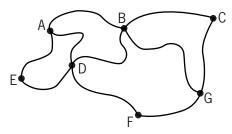
1. Find the degree of the vertices.

Vertex A: 3, Vertex B: 5; Vertex C: 3; Vertex D: 3

**2.** A mountain biker wishes to ride each of the seven trails. Is there a traversable path that would enable him to ride each trail exactly once?

No, there is no traversable path.

Use the following graph for Questions 3 and 4. The graph represents the streets in a neighborhood.



**3.** To be efficient, a snow plow driver should follow a traversable path. Is there a traversable path through this neighborhood?

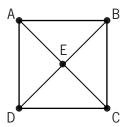
Yes, there is a traversable path.

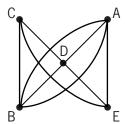
**4.** Find a traversable path that the snow plow driver can take.

Possible answer: A-B-D-A-E-D-F-G-B-C-G

## Set 2

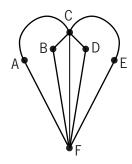
1. Are the graphs equivalent graphs?

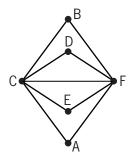




No, the graphs are not equivalent.

2. Are the graphs equivalent graphs?





Yes, the graphs are equivalent.