

# **Review Day**

**Unit 7 Graph Theory**

**Day 9**

# Review Day Warm Up!

Create the **a) expression tree**, **b) Use postorder traversal to find the Reverse Polish Notation**, **c) Evaluate the Reverse Polish Notation**.

1.  $(4 + 2) \cdot 6 - 3 + 1 \cdot (5 - 2)$

2.  $(5 - 1) + 8 / 2 - 3 \cdot 6 + 2$

# Review Day Warm Up ANSWERS!

Create the **a) expression tree**, **b) Use postorder traversal to find the Reverse Polish Notation**,  
**c) Evaluate the Reverse Polish Notation.**

1.  $(4 + 2) \cdot 6 - 3 + 1 \cdot (5 - 2)$

**b) 4 2 + 6 \* 3 - 1 5 2 - \* +**

**c) 36**

2.  $(5 - 1) + 8 / 2 - 3 \cdot 6 + 2$

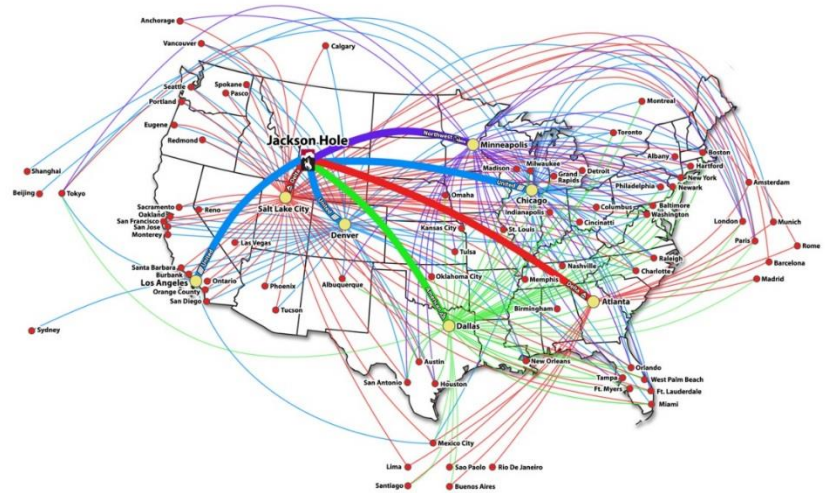
**b) 5 1 - 8 2 / 3 6 \* - 2 + +**

**c) -8**

# Connecting Flights

Look at the data below. Each line has the names of two cities. The line between the pairs of city means they are connected. For example, suppose that Louisville and Orlando might be connected by an airline.

Louisville – Orlando  
Tampa – Columbus  
Columbus – Orlando  
Key West – Orlando  
Orlando - Fort Lauderdale  
Orlando – Nassau



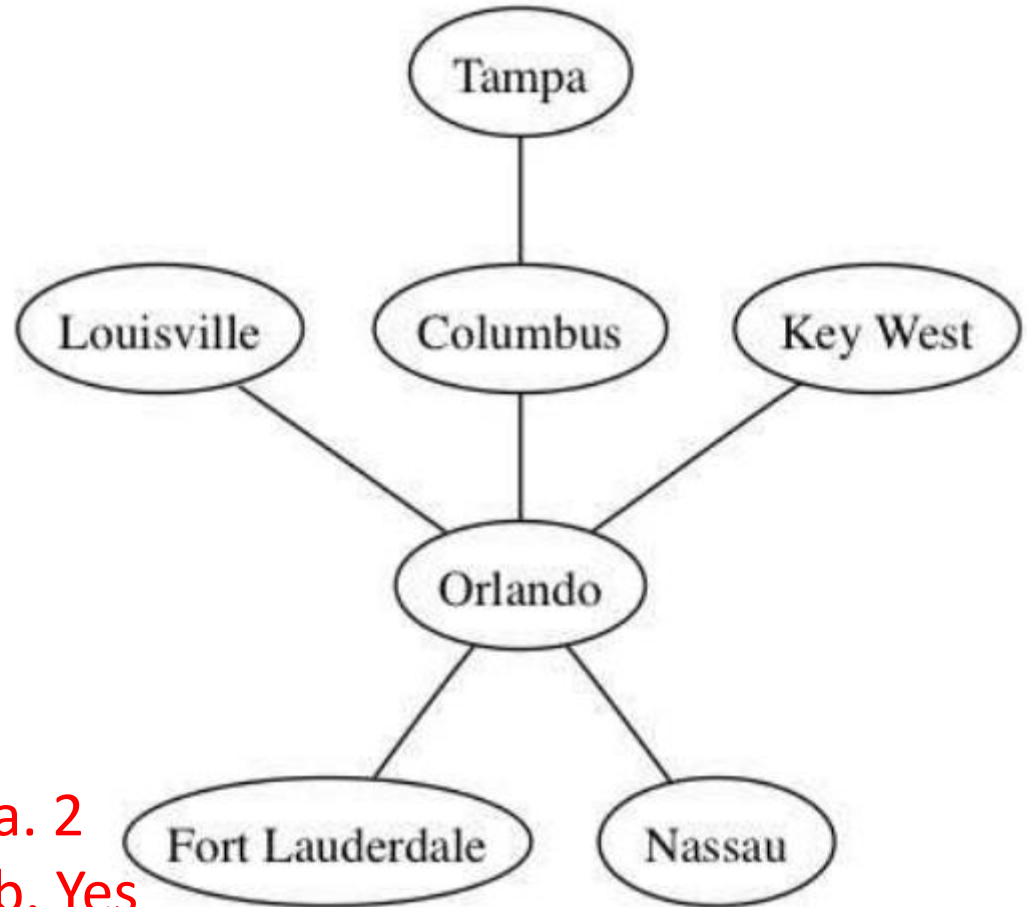
2. Draw a graph to represent all of the city connections. Be sure to label accordingly.

- a. What is the chromatic #?
- b. Is this a bipartite graph?
- c. Is this a complete bipartite graph?

- d. Is it planar?
- e. Is it complete? Connected?

# Connecting Flights Graph

Louisville – Orlando  
Tampa – Columbus  
Columbus – Orlando  
Key West – Orlando  
Orlando -- Fort Lauderdale  
Orlando – Nassau



- a. What is the chromatic #?
- b. Is this a bipartite graph?
- c. Is this a complete bipartite graph?
- d. Is it planar?
- e. Is it complete? Connected?

- a. 2
- b. Yes
- c. No
- d. Yes
- e. Not complete, yes connected

# Some HW Answers Packet p.19

12 a.  $3 \cdot 2 \cdot 8 \cdot 2 \cdot 3 \cdot - +$

b.  $5 \cdot 1 \cdot 13 + 2 \cdot 9 \cdot 3 / \cdot +$

c.  $4 \cdot 3 + 8 \cdot 2 +$

15 a. 33   b. 7   c. 9   d. 14

16 a.  $2 \cdot 3 \cdot 6 \cdot + 4 \cdot 1 + -$  and then evaluated = 15

b.  $5 \cdot 3 - 2 \cdot 7 \cdot 6 \cdot 2 / - +$  and evaluated = 8

# **LET'S GO SPEED DATING!**

**5 MIN DATES.**

**ON YOUR REVIEW SHEET CIRCLE OR  
HIGHLIGHT THE FOLLOWING QUESTIONS...**

**#2   #3   #5   #6   #9   #10**

**#13C   #14A   #17   #20**

These are the 10 questions you will be working on with a partner, rotating partners.

You need a pencil, review sheet and blank paper. **(Leave your cell phone!)**

# LET'S GO SPEED DATING!

## 5 PEOPLE ON EACH SIDE OF THE LOCKERS

Only one side of the lockers will move.  
I'll let you know which side when we get  
out there!

You need a pencil, review sheet and blank paper.  
**(Leave your cell phone!)**



**TEST REVIEW ANSWERS ARE ON  
THE CLASS WEBSITE**