**Sets**

1. Which 2 classes implement the **Set** interface?

2. What do you need to do if you wish to store **int** values in a **HashSet** or **TreeSet**?

3. What method adds new elements to a **HashSet** or **TreeSet**?

4. What is the difference between the way a **HashSet** and **TreeSet** store data?

5. The contents of **HashSet** and **TreeSet** objects can be displayed with a simple **println** statement.

This means that both of these classes have redefined what special method?

6. How are elements of a **TreeSet** stored?

7. Refer to the previous question. Access to these elements is provided with an ***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***, resulting in an ascending display of values.

8. How are elements of a **HashSet** stored?

9. Refer to the previous question. What is the benefit of storing **HashSet** elements this way?

10. What does the **next** method of the **Collection** class do?

11. What method returns the number ofelements in the **Set** object?

12. When does the **hasNext** method **return true**? And when does it **return false**?

13. Explain the difference between the **Iterator remove** method and the **Set remove** method.

14. What does the **Set contains** method do?

15. In a Venn diagram a rectangle is used to represent the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ set*.*

16. What do circles represent in a Venn Diagram?

17. What Boolean Algebra Expression would denote *the intersection of Set A and Set B*.

18. What Boolean Algebra Expression would denote *the union of Set A and Set B B*.

19. What Boolean Algebra Expression would denote *the difference of Set A and Set B*.

20. What Boolean Algebra Expression would denote *the difference of Set B and Set A*.

*You need to find the union, intersection, and differences.*

21. **Set A = [2, 4, 6, 8, 10, 12] Set B = [3, 6, 9, 12, 15]**

A + B = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ A \* B = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A - B = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ B - A = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

22. **Set A = [2, 4, 6, 8, 10, 12] Set B = [1, 2, 4, 8, 16, 32]**

A + B = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ A \* B = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A - B = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ B - A = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_