Name $\qquad$ Date $\qquad$

Question 1: Show the output from the following code segments:


Question 1: Show the output from the following code segments:

| D (12) | ```public class V1 { public static void main(String[] args) { foo(false); System.out.print("All done!"); } public static void foo(boolean a) { boolean b = true; bar(a, b); boolean d = false; soo(d, "dog"); } public static void bar(boolean a, boolean b) { if (a \|| b) { System.out.println("trick"); } else if (a) { System.out.println("treat"); } else if (b) { System.out.println("knock"); } else { System.out.println("run"); } boolean c = !a; soo(c, "cat"); } public static void soo(boolean e, String s) { if (e) { System.out.println(s + " is " + e); } else { System.out.println(s + " is " + e); } } }``` |
| :---: | :---: |

Question 2: Valid or Invalid Syntax?

| A <br> (1) | ```int numBooks = 3; int numNotebooks = 2; numBooks ++ numNotebooks;``` |  |
| :---: | :---: | :---: |
| B <br> (1) | ```int candies = 5; System.out.print("Candy count = " + candies);``` |  |
| B <br> (1) | int 1veryTall $=7$; |  |
| D <br> (1) | ```String s1 = "Trick"; String s2 = "Treat"; char c = s1.chairAt(3);``` |  |
| E <br> (1) | ```int a = 15; if ((a >= 10) \|| (a <= 20)) a = a * 7; else a = a * 3;``` |  |

Question 3 (24): During text messaging, people use abbreviations to save on typing. Write the code to ask the user for an SMS Abbreviation and perform the translation for the following 3 abbreviations (creating a method is not required):

```
- GMAB means Give Me A Break
- TOT means Trick Or Treat
- SSM means Study Some More
```

If the abbreviation is not included in the list, your program should output
"Unknown Abbreviation"
for the translation.
The input should be case insensitive and the output should be as shown above.
Example Run:
Please enter an abbreviation:
GMAB
GMAB means Give Me A Break

```
import java.util.Scanner;
public class v1 {
    public static void main(String[] args) {
    }
}
```

Question 4 (24): Write a public static void method named halloween that takes in an int candies as an argument and prints a phrase based on the rules below:
candies is greater than 0 but Less than 5: print "Eat Some More" candies is 30 or more but less than 70: print "Stomach Ache"
candies is 5 or greater but less than 30: print "That's a Lot"
candies is 70 or over:
candies is 0 or less:
print "Must Share"
print "Trick or Treat Time"

Question 5 (15): Write a block of code that will do the following:

In the range of numbers from 5 to 50 inclusive
When a number is even your code should output " $\mathbf{N}$ is Sour Patch"
When a number is odd your code should output " N is Licorice"
When a number is divisible by 3 print out " $\boldsymbol{N}$ is divisible by 3 "

Question 6 (27): Write a complete class named Warlock with 2 static void methods and a static void main method as shown below:
i. A method named mystery with zero arguments that will print "I am the mystery method!!!"
ii. A method named goblin with 2 int arguments $\mathbf{a}$ and $\mathbf{b}$. Use a to determine how many times to call the mystery. After all invocations of mystery are complete, print the product of $\mathbf{a}$ * $\mathbf{b}$.
iii. Show the method invocation of goblin from the main method.

