

1. Store the absolute value of integer *n* in double variable *x*:

```
int n = scan.nextInt();  
  
double x =
```

2. Write code to store the square root of integer *n* in the double variable *x*:

```
int n = scan.nextInt();  
  
double x =
```

3. Write code to raise integer *n* to the 5th power in double variable *x*:

```
int n = scan.nextInt();  
  
double x =
```

4. Write code to store a random integer between -10 and 10 inclusive in *x*:

```
int x =
```

5. Write code to store a random integer between 12 and 15 inclusive in *x*:

```
int x =
```

6. Write code to store a random even integer between 4 and 10 inclusive in *x*.

```
int x =
```

7. Given a properly initialized String variable *str* containing at least 2 characters, write code to store a copy of *str* in a new String *str2* that is missing the last character. For example the String "dog" would be saved as "do" in *str2*, and "Friday" would be saved as "Frida".

8. Complete the following method which is meant to return a String created using Strings *a* and *b* where String *b* is inserted exactly in the middle of String *a*. Assume String *a* has an even number of characters and is at least 2 characters long. Example: sending over "spooky" and "cat" returns "spocatoky".

```
public String mashup(String a, String b)  
{  
  
  
  
  
  
  
  
  
  
}
```

(continued on back)

Questions 9 through 17 use this class:

```
public class Frog
{
    private int location;

    public Frog()
    {
        location=0;
    }

    public void hop()
    {
        location++;
    }

    public int getLocation()
    {
        return location;
    }
}
```

12. Fill in the blanks to create an accurate statement:

The object frankie is an _____ of Frog

14. True/False:

frankie is an instance of object Frog

16. True/False:

Object frankie has an attribute location

18. Complete the following method which is meant to return a String made up of the first and last characters of String a. For example, sending over "hello" returns "ho". Assume String a is 2 or more characters long.

```
public String startAndEnd(String a)
{

}

}
```

19. Complete the following method which is meant to return a random integer between integers a and b inclusive.

```
public int randomizer(int a, int b)
{

}

}
```

9. Write a line of code that creates a new Frog object named "frankie":

10. Write a line of code that makes frankie hop forward one space.

11. Write a line of code the prints frankie's location.

13. Fill in the blanks to create an accurate statement:

The _____ Frog has an attribute _____

15. True/False:

Frog is an instance of class frankie

17. What is printed by the following code?

```
Frog hubba = new Frog();
hubba.hop();
hubba.hop();
hubba.hop();
System.out.println(hubba.getLocation());
```