Name: $\qquad$
Date: $\qquad$
Class: $\qquad$

## AP Java Unit 2

1. What is the name of the method to print out text in Java?
A. System.out. println()
B. System.out.printline()
C. System.output()
D. System.out.PRINTLN()
2. What is the output of the following lines?
int $\mathrm{x}=24$;
System.out.println("The total is " $+\mathrm{x}+\mathrm{x}$ );
A. The total is 24
B. The total is 2424
C. The total is 48
D. The total is $x+x$
3. Which of the following is not a primitive type?
A. int
B. double
C. String
D. boolean
E. char
4. What is the value of $x$ after this code?
int $\mathrm{x}=5$;
$x=10$;
$x=4 ;$
A. 5
B. 10
C. 4
D. true
5. What is the proper syntax to initialize a double called temperature to have the value $\mathbf{7 0 . 4}$ ?
A. int temperature $=70.4$;
B. double temperature $=70.4$;
C. temperature $=70.4$;
D. float temperature $=70.4$;
6. What is the result of this expression?
$5+2 / 3+1$
A. 5
B. 6
C. 6.67
D. 0
7. Which expression returns the 1 's place of an integer $x$ ?
A. $\mathrm{x} \% 10$
B. $x / 10$
C. $x \% 100$
D. $x+1$
8. What is the value of myInteger after this line of code? int myInteger $=(i n t) 5.6 ;$
A. 6
B. 5.5
C. 5
D. 9
9. Which expression is true?
A. true \&\&! true
B. !false II !true
C. true \&\& false
D. false II false II !true
10. Which of these is not a logical operator?
A. \&\&
B. !
C. II
D. ++
11. What is the output of this for loop?
```
for(int i = 0; i < 100; i += 2)
{
    System.out.println(i);
}
```

A. The even numbers from 0 to 98 , inclusive
B. The even numbers from 0 to 100 , inclusive
C. All of the numbers from 0 to 100
D. The odd numbers from 0 to 98 , inclusive
12. What is the output of this for loop?

```
for(int i = 10; i > 2; i -= 3)
{
    System.out.println(i);
}
```

A. 10

7
4
B. 10

7
4
1
C. 1

2
3
D. 10

8
6
4
2
13. How many times will the loop execute?

```
int i = 0;
while(i < 50)
{
    System.out.println(i);
    i += 10;
}
```

A. 0
B. 4
C. 5
D. 50
14. What will this code output?

```
if(true && true && false)
{
    System.out.println("Hello Karel");
}
if(true && 4 == 2 + 2)
{
    System.out.println("Second if statement!");
}
```

A. Hello Karel
B. Hello Karel

Second if statement!
C. This program will print nothing
D. Second if statement!
15. What will this program print if the value of grade is 80 ?

```
if(grade > 90)
{
    System.out.println("A");
}
else if(grade > 80)
{
    System.out.println("B");
}
else if(grade > 70)
{
    System.out.println("C");
}
```

A. A
B. $B$
C. C
D. Nothing

## 16. What output will be produced by

System.out.println("Hello");
System.out.println("Karel");
A. Hello Karel
B. HelloKarel
C. Hello

Karel
D. Error
17. What will the values of $x$ and $y$ be after this code segment runs?

```
int x = 100;
int y = 100;
if (x <= 100)
{
    if (y > 100)
    {
            x = 200;
    }
    else
    {
        x = 99;
    }
}
else
{
    x++;
}
y = x + y;
A. \(x=100\)
\(y=200\)
B. \(x=101\)
\(y=100\)
C. \(x=101\)
\(y=201\)
D. \(x=99\)
\(y=199\)
```

18. What will the code segment output?
```
for (int m = 5; m > 0; m--)
{
    for(int n = m; n > 0; n--)
    {
        System.out.print("*");
    }
    System.out.println();
}
```

A. *
**
***
****
*****
B. ${ }^{* * * * *}$
****
***
**
*
C. ${ }^{* * * * *}$
*****
*****
*****
*****
D. $* * * * * * * * * * * * * * *$
19. Refer to the following code segment:

```
double myDouble = 1/4;
```

System.out.println("1 / $4=$ " + myDouble);

The output of the code is:
$1 / 4=0.0$
The student wanted the output to be:
$1 / 4=0.25$
Which change to the first line of their code segment would get the student the answer that they wanted?
A. int myDouble $=1 / 4$;
B. double myDouble $=$ (double) $1 / 4$;
C. double myDouble $=$ (int) $1 / 4$;
D. double myDouble $=$ (int) (1.0/4.0);
20. What is the result of this expression?

$$
4+8 * 3 / 4+5 \% 2
$$

A. 5
B. 6
C. 12
D. 11
21. Which of these is not a valid Java method name?
A. runInCircles
B. jumpHurdle
C. find tower
D. finishMaze
22. Which of these is not a valid Java method name?
A. spin10Times
B. 10TimesMove
C. moveTenTimes
D. spinTenTmes
23. Which of these characters can a Java method name start with?
(I) Letters
(II) Numbers
(III) Underscore (IV) \$ Sign
A. I only
B. I and II
C. II only
D. I and III
E. I, III, and IV
24. What in this code segment could potentially cause a bug in our program?

```
String myString = readLine("What is your name?");
if (myString == "Karel")
{
    System.out.println("Hi Karel!");
}
else
{
    System.out.println("You're not Karel!");
}
```

A. Syntax error in the if statement
B. Nothing
C. Trying to store a Line in a String variable.
D. Comparing Strings with $==$ instead of the .equals method.
25. What is the output of this program?

```
int sum = 1;
System.out.println("Welcome to the adding machine!");
while(sum < 10)
{
    sum += sum;
    System.out.println(sum);
}
```

A. Welcome to the adding machine!

1
2
4
8
16
B. Welcome to the adding machine!

2
4
8
16
C. Welcome to the adding machine!

2
4
8
D. This code has an infinite loop.

