Java   Name –
if statement multiple choice worksheet #1

1. The grading scale is meant to be 0-69 E, 70-79 C, 80-89 B, and 90-100 A

```
int average = <an integer value in the range of 0 to 100 inclusive>
if (average >= 90)
    System.out.println("Your grade is A");
else if (average >= 80)
    System.out.println("Your grade is B");
else if (average >= 70)
    System.out.println("Your grade is C");
else
    System.out.println("Your grade is E");
```

For which values of average does the code segment display the correct letter grade?
A. For all values in the proper `average` range
B. Only for values of `average` < 70
C. Only for values of `average` < 80
D. Only for values of `average` < 90
E. There are no values of average that will execute properly.

2. The grading scale is meant to be 0-69 E, 70-79 C, 80-89 B, and 90-100 A

```
int average = <an integer value in the range of 0 to 100 inclusive>
if (average < 70)
    System.out.println("Your grade is E");
else if (average >= 70)
    System.out.println("Your grade is C");
else if (average >= 80)
    System.out.println("Your grade is B");
else if (average >= 90)
    System.out.println("Your grade is A");
```

For which values of average does the code segment display the correct letter grade?
A. For all values in the proper `average` range
B. Only for values of `average` < 70
C. Only for values of `average` < 80
D. Only for values of `average` < 90
E. There are no values of `average` that will execute properly.

3. Consider the following two code segments.

Segment 1
```
int average = <an integer value in the range of 0 to 100 inclusive>
if (average >= 90)
    System.out.println("Your grade is A");
else if (average >= 80)
    System.out.println("Your grade is B");
else if (average >= 70)
    System.out.println("Your grade is C");
else
    System.out.println("Your grade is E");
```

Segment 2
```
int average = <an integer value in the range of 0 to 100 inclusive>
if (average >= 90)
    System.out.println("Your grade is A");
if (average >= 80)
    System.out.println("Your grade is B");
if (average >= 70)
    System.out.println("Your grade is C");
if (average < 70)
    System.out.println("Your grade is E");
```

For which values of average will Segment 1 and Segment 2 have the same output?
A. For all values of `average` in the proper average range
B. Only for values of `average` < 70
C. Only for values of `average` < 80
D. Only for values of `average` < 90
E. There are no values of `average` that will execute properly.