

Section D

Name Neil

Time           

1. Define those variables with correct type of data.

int count = 1;

char letter = 'a' ;

float x = 4.0 ;

float d = 132.32;

boolean happy = false ;

2. Consider a grading system where numbers are turned into letters. Fill in the blank in the following code to complete the boolean expression.

```
float grade = random( 0, 100 ) ;
```

```
if ( grade >= 80 ) {  
    println ( " Assign letter grade A. " ) ;  
} else if ( grade >= 70 ) {  
    println ( Assign letter grade B ) ;  
} else if ( grade >= 60 ) {  
    println ( Assign letter grade C ) ;  
} else if ( grade >= 50 ) {  
    println ( Assign letter grade D ) ;  
} else if ( grade < 50 ) {  
    println ( Assign letter grade F ) ;  
}
```

3.

```
int x = 5 ;  
  
if ( x == 5 ) {  
    x = 6 ;  
}  
  
if ( x == 6 ) {  
    x = 5 ;  
}  
  
println ( " X is now: " + x ) ;
```

OUTPUT : 5

```
int x = 5 ;  
  
if ( x == 5 ) {  
    x = 6 ;  
} else if ( x == 6 ) {  
    x = 5 ;  
}  
  
println ( " X is now: " + x ) ;
```

OUTPUT : 6

4. Draw a series of lines moving down the screen.

```
int endY ;  
  
void setup ( ) {  
    size ( 200 , 200 ) ;  
    frameRate ( 5 ) ;  
    endY = 200 ;  
}  
  
void draw ( ) {  
    background ( 0 ) ;  
    for ( int y = 0 ; y <= 200 ; y++ ) {  
        stroke ( 255 ) ;  
        line ( 0 , y , width , y ) ;  
    }  
}
```

5. Create a 'sum' function that adds 3 numbers and print the result to the message window once.

```
void setup () {  
    int a,b,c;  
    _____ ;  
}  
  
void draw () {  
    sum(1,2,3);  
    _____ ;  
}  
  
int sum ( int a , int b , int c ) {  
    int total = a + b + c ;  
    return total ;  
}
```