

Software Design I (CS 120)
Quiz 05: Monday, 23 October 2017

NAME _____

- (1) (5 pts.) For each of the following loops, write out how many times it will loop. (This is the same as the number of lines each will print out.) In all cases, assume that the code is contained within a fully functional Java program.

```
int x = 1;
while ( x < 5 )
{
    System.out.println( x + 1 );
    x++ ;
}
```

(a) **Answer:** _____

```
int y = 0;
while ( y <= 10 )
{
    System.out.println( y );
    y = y + 2;
}
```

(b) **Answer:** _____

```
int z = 20;
while ( z >= 0 )
{
    System.out.println( z );
    z--;
}
```

(c) **Answer:** _____

```
int v = 1;
while ( v < 20 )
{
    System.out.println( v );
    v = v * 2;
}
```

(d) **Answer:** _____

```
int w = 10;
while ( w > 0 )
{
    System.out.println( w );
    w = w - ( 1 / 2 );
}
```

(e) **Answer:** _____

- (2) (5 pts.) Write out the exact output of the following code (again assuming it was executed as part of a fully functional Java program).
-

```
for ( int i = 0; i <= 6; i++ )
{
    System.out.print( i + ": " );
    if ( i == 0 || i == 6 )
    {
        System.out.println( "OK" );
    }
    else if ( ( i % 2 ) == 0 )
    {
        System.out.println( "THIS" );
    }
    else
    {
        System.out.println( "THAT" );
    }
}
```
