16.216: ECE Application Programming
Fall 2011

Lecture 17: Key Questions
October 17, 2011

1. Explain the use of a `continue` statement with a loop. What is the difference between `break` and `continue`?

2. In what cases are `for` loops useful? Describe the basic structure of a `for` loop.

3. Describe the operators that allow you to directly modify a variable without writing a
   full assignment statement.

4. **Example:** What does each of the following print?

a.
```c
for (i = 5; i < 40; i += 8)
   {
       printf("%d ", i);
   }
```

b.
```c
for (i = -5; i < -10; i--)
   {
     printf("%d ", i);
   }
```

c.
```c
for (i = 10; i <= 100; i = i+10)
   {
       if (i % 20)
           printf("%d ", i);
   }
```

d.
```c
for (i = 5; i < 10; i += i%2)
   {
     printf("%d ", i++);
   }
```