Lab 2 – Functions and Pointers – Suggested Answers

Q1: Suggested Answer
```
void numDigits2(int num, int *result)
{
  *result=0;
  do {
    (*result)++;
    num = num/10;
  } while (num > 0);
}
```

Q2: Suggested Answer
```
int digitPos1(int num, int digit)
{
  int pos=0;
  do {
    pos++;
    if (num % 10 == digit)
      return pos;
    num = num / 10;
  } while (num > 0);
  return 0;
}
```

Q3: Suggested Answer
```
int square1(int num)
{
  int count=0, k=1, result=0;
  while (count < num)
  {
    result += k;
    k += 2;
    count++;
  }
  return result;
}
void square2(int num, int *result)
{
  int count=0, k=1;
  *result=0;
  while (count < num)
  {
    *result += k;
    k += 2;
    count++;
  }
}
```