

2) (10 pts) ANL (Summations and Algorithm Analysis)

a) (8 pts) Give a summation that represents the value returned by the following function in terms of its input parameter, n , and then derive its closed form:

```
int something_to_ponder_over(int n)
{
    int i, retval = 0, pow = 1;
    for (i = 0; i < n; i++)
    {
        retval += pow;
        pow *= 14;
    }
    return retval;
}
```

b) (2 pts) Using big-oh notation, what is the runtime of the function given in part (a)?