Important Remarks

- Homework is due on Oct. 15th, 2013 at the beginning of class

- **For all problems, keeping your work in fractions will produce easier, more accurate results.**

- Start early and get help if you need it

- Start a new page per problem

- Show all the work

- Specify all the units

- Circle your answers

- Staple pages

1. Given the circuit shown in Figure 1. Compute V_{out}.
   Even if you know the answer you MUST derive it and show all your work.
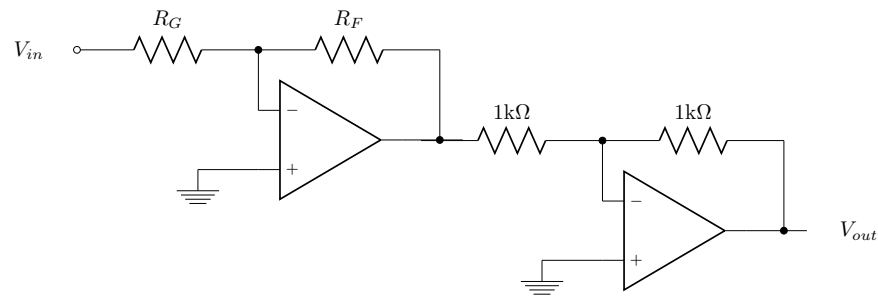

Figure 1:

2. For the op-amp circuit below assume it is an ideal op-amp with a supply voltage of ±15V:

   (a) Determine the gain of the circuit.

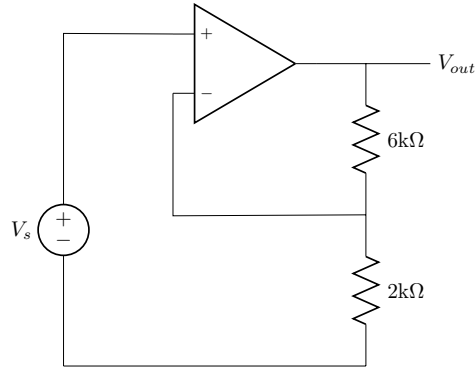   (b) Determine the maximum value for V_S such that the op-amp does not saturate.

Figure 2:

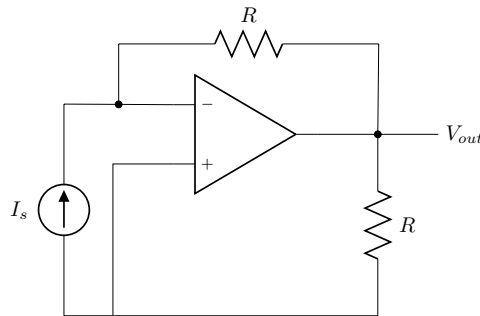3. For the op-amp circuit below, find V_{out}. Assume it is an ideal op-amp:

Figure 3: