1. Convert the following pairs of decimal numbers to 5-bit two’s complement numbers, then add them.

State whether or not overflow occurs in each case.

1. 5 and 10
2. 7 and 13
3. -14 and 11
4. -5 and 7
5. -3 and -8
6. Repeat the above problem for the subtract operation, where the second number of each pair is to be subtracted from the first number. State whether or not overflow occurs in each case.