Math 5b, homework 14.



- Cities A, B, and C, together with the straight roads connecting them, form a triangle. It is known that the direct route from A to B is 200 km shorter than the detour through C, and the direct route from A to C is 300 km shorter than the detour through B. Find the distance between cities B and C.
- 2. One pipe can fill a pool in 11 hours and 15 minutes. Two pipes can fill it in 5 hours. How long it will take to fill the pull with only second pipe opens?
- 3. One pipe can fill a pool 1.25 times as fast as a second pipe. When both pipes are opened, they fill the pool in five hours. How long would it take to fill the pool if only the slower pipe is used?
- 4. Write the binary number in a decimal system;
 - *a*. 1110011₂; *b*. 1000001₂; *c*. 1010101₂
- 5. Write numbers 48, 78, 100 in binary system.
- 6. Write the ternary number (numbers in system, based on 3) in a decimal system;

a. 121₃; *b*. 2101₃; *c*. 2221

7. Write numbers 48, 78, 100 in ternary system.(for all problems about numeral system, review the classwork #2)