

1. Show that for a metrizable space X , the following are equivalent:

1. X is second countable,
2. X is Lindelöf,
3. X is separable.

Mine your previous homework assignments!

2. Munkres 30.3
3. Munkres 31.3
4. Munkres 31.6
5. Munkres 32.2
6. Munkres 32.4