FIFTH PROBLEM SET
Math 5615H: Honors Analysis

Due W 11 October, 2017.
10 points each; total 50 points.

1. Show that for an arbitrary set E in a metric space (X, d), the set E' of its limit points is closed.

2. Show that any set $E \subset \mathbb{R}$ has at most countably many isolated points.

3. Exercise 11 on p.44 of Rudin.

4. Exercise 12 on p.44 of Rudin.

5. Exercise 22 on p.45 of Rudin.