HOMEWORK 20

Note: ∗ marked problems might be slightly more difficult or interesting than the unmarked ones.

(1) Show that $e_y \simeq_p \bar{f} * f$ for a path f from x to y in a topological space X.

(2) Topology (Munkres), Chapter 3, Section 26, Exercise (13).

(3) Topology (Munkres), Chapter 4, Section 31, Exercise (8).

(4) Topology (Munkres), Chapter 4, Section 32, Exercise (10).

(5) Topology (Munkres), Chapter 4, Section 37, Exercise (4).

(6) Topology (Munkres), Chapter 9, Section 51, Exercise (2).

(7) Topology (Munkres), Chapter 9, Section 51, Exercise (3).

(8) Topology (Munkres), Chapter 9, Section 52, Exercise (7).