(1) Hatcher 2.1.26 (p. 133)
(2) Hatcher 2.1.27 (p. 133)
(3) The solid torus is the space $S^1 \times D^2$; this is a donut. Use the Mayer-Vietoris sequence to compute the homology of the solid torus.
(4) Let $K$ be a knot in $S^3$, that is, a smoothly embedded circle. It follows from the implicit function theorem that $K$ has a neighborhood $U$ homeomorphic to $S^1 \times D^2$, so that $K$ is identified with $S^1 \times 0$. Use the Mayer-Vietoris sequence to compute $H_1(S^3 \setminus K)$. (Hint: cover $S^3$ by $U$ and $S^3 \setminus K$.)
(5) Hatcher 2.2.28 (p. 157)
(6) Hatcher 2.2.33 (p. 158)
(7) Hatcher 2.2.34 (p. 158). (You can prove the long exact sequence in reduced homology if you prefer.)

Suggested review / qualifying exam practice (not to turn in):
(1) Hatcher 2.1.29, 2.1.30, 2.1.31.
(2) Hatcher 2.2.29, 2.2.30, 2.2.31, 2.2.32, 2.2.35, 2.2.36.

Email address: lipshitz@uoregon.edu