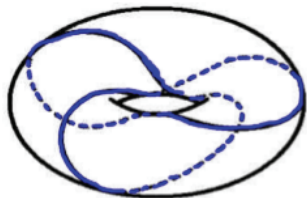


Torus Knots

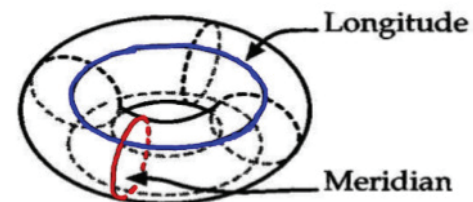
- Read Section 5.1
- Work on homework.
- **Definition:** A *torus knot* is a knot K that lies on an unknotted torus.

Example:



Meridians and Longitudes

- **Definition:** A *meridian curve* on a torus is a curve that bounds a disc in the interior of the torus, but does not bound a disc on the surface of the torus.
- **Definition:** A *longitude curve* on a torus is a curve that intersects a meridian exactly one.



Torus Knots

- **Definition:** A (p,q) torus knot is a knot on the surface of a torus that goes around p times in the meridian direction and q times in the longitude direction.
- **Theorem:** A (p,q) torus knot exists if and only if p and q are relatively prime.
- **Theorem:** A (p,q) torus knot is equivalent to a (q,p) torus knot
- **Theorem:** A (p,q) torus knot has crossing number the minimum of $p(q-1)$ and $q(p-1)$.

Example

