Rule 1: if X is contractible
then $\pi_n(X)=0$ for $n\geq 1$

Rule 2: if X is an Eilenberg MacLane space of type $(\mathbb{Z}, n)$.
and computing $\pi_n(X)$
then $\pi_n(X)=\mathbb{Z}$

Rule 3: if X is an Eilenberg MacLane space of type $(\mathbb{Z}/2\mathbb{Z}, n)$
and computing $\pi_n(X)$
then $\pi_n(X)=\mathbb{Z}/2\mathbb{Z}$

Rule 4: if C is a cyclic group
and X is an Eilenberg MacLane space of type (C, n)
and computing $\pi_n(X)$
then $\pi_n(X)=C$

Rule 5: if X is an Eilenberg MacLane space of type $(\mathbb{Z}, n)$.
and computing $\pi_r(X)$ with $r\neq n$
then $\pi_r(X)=0$.

Rule 6: if X is an Eilenberg MacLane space of type $(\mathbb{Z}/2\mathbb{Z}, n)$.
and computing $\pi_r(X)$ with $r\neq n$
then $\pi_r(X)=0$.

Rule 7: if C is a cyclic group
and X is an Eilenberg MacLane space of type (C, n)
and computing $\pi_r(X)$ with $r\neq n$.
then $\pi_r(X)=0$.

Rule 8 - If $X = A \times B$ is the product of spaces
and A is contractible
and B is contractible
then X is contractible.

Rule 9 - If $X = A * B$ is the join of spaces
and A is contractible
or B is contractible
then X is contractible

Rule 10 - If $X = B(Y)$ is a classifying space
and Y is an Eilenberg MacLane space of type $(\mathbb{Z}, n)$
then X is an Eilenberg MacLane space of type $(\mathbb{Z}, n+1)$

Rule 11 - If $X = B(Y)$ is a classifying space
and Y is an Eilenberg MacLane space of type $(\mathbb{Z}/2\mathbb{Z}, n)$
then Y is an Eilenberg MacLane space of type $(\mathbb{Z}/2\mathbb{Z}, n+1)$

Rule 12 - If $X = B(Y)$ is a classifying space
and Y is an Eilenberg MacLane space of type (C, n)
then X is an Eilenberg MacLane space of type $(C, n+1)$

Rule 13 - If $X = \Omega(Y)$ is a loop space.
and Y is an Eilenberg MacLane space of type $(\mathbb{Z}, n)$
and $n \geq 1$
then X is an Eilenberg MacLane space of type $(\mathbb{Z}, n-1)$

Rule 14 - If $X = \Omega(Y)$ is a loop space
and Y is an Eilenberg MacLane space of type $(\mathbb{Z}/2\mathbb{Z}, n)$
and $n > 1$
then X is an Eilenberg MacLane space of type $(\mathbb{Z}/2\mathbb{Z}, n-1)$

Rule 15: If $X = \Omega(Y)$ is a loop space.
and Y is an Eilenberg Maclane of type (C, n)
and $n > 1$.
then X is an Eilenberg Maclane space of type $(C, n-1)$

Rule 16: If X is 1-connected.
and $H_r(X) = 0$ for $0 < r < n$
and computing $\Pi_s(X)$ with $1 \leq s \leq n$
then $\Pi_s(X) = H_s(X)$.

Rule 17: if X is the 3-sphere (S^3).
and computing $\Pi_n(X)$
and $n \geqslant 3$
and previously computed. $\Pi_n(S^2)$
then $\Pi_n(S^3) = \Pi_n(S^2)$.

Rule 18: if X is the 2-sphere (S^2)
and computing $\Pi_n(X)$
and $n \geqslant 3$
and previously computed $\Pi_n(S^3)$
then $\Pi_n(S^2) = \Pi_n(S^3)$.

Rule 19: if $X = \Omega(Y)$ is a loop space
and Y is a r-sphere
and computing $\Pi_q(\Omega(Y))$
and previously computed $\Pi_{q+1}(Y)$
then $\Pi_q(\Omega(Y)) = \Pi_{q+1}(Y)$

Rule 20. if $X = \Omega^2(Y)$ is a [illegible]

and Y is a $q+2$-sphere with n an odd integer

and computing $\pi_q(\Omega^2(Y))$

and previously computed $\pi_{q+2}(Y)$

then $\pi_q(\Omega^2(Y)) = \pi_{q+2}(Y)$.

Rule 21. if X is a n-sphere (S^n)

and computing $\pi_{n+k}(X)$

and $n > k+1$

and previously computed some $\pi_{n+k+r}(S^{n+r})$ with $n+r > k+1$

then $\pi_{n+k}(S^n) = \pi_{n+k+r}(S^{n+r})$

Rule 22. if $X = A \times B$ is a cartesian product

and computing $\pi_n(X)$

and A is contractible

and previously computed $\pi_n(B)$

then $\pi_n(X) = \pi_n(B)$

Rule 23. if $X = A \times B$ is a cartesian product

and computing $\pi_n(X)$

and B is contractible

and previously computed $\pi_n(A)$

then $\pi_n(X) = \pi_n(A)$