key   washers=same   shells=opposite

Area: TB
ROT: TB $\rightarrow$ (W) $\int \pi((T)^2 - (B)^2)dx$

$\int \pi((\#-F)^2 - (\#-C)^2)dx$ (above/R)

$\int \pi((F-\#)^2 - (C-\#)^2)dx$ (below/L)

Area: TB
ROT: RL $\rightarrow$ (S) $\int 2\pi x(T-B)dx$

$\int 2\pi(\#-x)(T-B)dx$ (above/R)

Area: RL $\int 2\pi(x-\#)(T-B)dx$ (below/L)
ROT: RL $\rightarrow$ (W) $\int \pi((R)^2 - (L)^2)dy$

$\int \pi((\#-F)^2 - (\#-C)^2)dy$ (above/R)

$\int \pi((F-\#)^2 - (C-\#)^2)dy$ (below/L)

Area: RL $\rightarrow$ (S) $\int 2\pi y(R-L)dy$
ROT: TB

$\int 2\pi(\#-y)(R-L)dy$ (above/R)

$\int 2\pi(y-\#)(R-L)dy$ (below/L)