[1] How many ways can one make change for 50 cents, using pennies, nickels, and dimes?
[2] How many ways can one fill a tube of length 10, using sticks of length 1 and 2?
[3] Up to rotational symmetry, how many ways can we choose three of the six edges of a tetrahedron?
Up to rotational symmetry, how many ways can we color the six faces of a cube, using at most two colors?
[5] Up to symmetry, how many ways can the beads of a five bead necklace be colored, using exactly three colors? Consider only rotations, and use all three colors.
Test 1

[6] For each of the following Young tableaux, find the corresponding polygon dissection using Stanley's correspondence.

\[
\begin{array}{ccc}
1 & 3 & 4 \\
2 & 5 & 6
\end{array}
\]

\[
\begin{array}{ccc}
1 & 3 & 4 \\
2 & 5 \\
6 & 7
\end{array}
\]

\[
\begin{array}{cc}
1 & 3 \\
2 & 6 \\
4 & 7 \\
5 & 8
\end{array}
\]
[7] For each of the following polygon dissections, find the corresponding Young tableau using Stanley's correspondence.