A study of fish below a water treatment plant on Boulder Creek collected $n = 100$ fish. Of these, 62 were female. Is this statistically significant evidence that the proportion of female fish is greater than 0.5? Use a significance level of 0.05.

**Step 1**

**Step 2**

**Step 3**

*Continue with the rest of the hypothesis test even if the assumptions do not hold.*

**Step 4**

**Step 5**

**Step 6**

**Step 7**