Students will be able to complete the following problems after watching the video:

*Are the following conjectures true or false? Give a counterexample for any false conjecture.*

Given: $\angle ABC$ and $\angle CBD$ form a linear pair
Conjecture: $\angle ABC \cong \angle CBD$

Given: $\overline{AB}$, $\overline{BC}$, and $\overline{AC}$ are congruent.
Conjecture: A, B, and C are collinear.

Given: $\overline{AB} + \overline{BC} = \overline{AC}$
Conjecture: $\overline{AB} = \overline{BC}$

Given: $\angle 1$ is complementary to $\angle 2$, and $\angle 1$ is complementary to $\angle 3$
Conjecture: $\angle 2 \cong \angle 3$

Statement: “All dolphins are mammals.”

If-then statement:

Inverse:

Converse:

Contrapositive: