# Geometry Inductive Reasoning YAY MATH! 

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: $\angle A B C$ and $\angle C B D$ form a linear pair Conjecture: $\angle A B C \cong \angle C B D$

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

Given: $\overline{A B}+\overline{B C}=\overline{A C}$
Conjecture: $\overline{A B}=\overline{B C}$

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:

