Squeeze Theorem Activity

This activity is intended to help students understand the Squeeze Theorem."

Directions: This worksheet is to be used in conjunction with the Gradarius Assignment titled "Squeeze Theorem Activity".

First, we start by presenting the Squeeze Theorem...

Theorem 1 (Squeeze Theorem)**.** *Suppose that*

$$g(x) \leq f(x) \leq h(x)$$

for all x close to a but not necessarily equal to a. If

$$\lim_{x \to a} g(x) = L = \lim_{x \to a} h(x),$$

then $\lim_{x \to a} f(x) = L$.

1 State the conditions of the Squeeze Theorem for problem 1.

2 State the conditions of the Squeeze Theorem for problem 2.

3 State the conditions of the Squeeze Theorem for problem 3.

4 Explanin why there are extra steps in problem 3 that we did not need in problem 2.