Use a mathematical proof to determine if the figure shown is an equilateral triangle. 1)



2) Using complete sentences, explain why the figure in #1 is or is not an equilateral triangle.



Use a mathematical proof to determine if the figure shown is a rhombus. 3)

4) Using complete sentences, explain why the figure in #3 is or is not a rhombus.

Use a mathematical proof to determine if the figure shown is a rectangle. 5)



6) Using complete sentences, explain why the figure in #5 is or is not a rectangle.

7) Use a mathematical proof to determine if the figure shown is a rhombus.



8) Using complete sentences, explain why the figure in #7 is or is not a rhombus.

Write the equation of g(x) in the form of g(x) = f(x) + k, then describe how f(x) and g(x) compare when graphed on the same coordinate plane.

9. f(x) = 5x + 8g(x) = 5x - 4 10. $f(x) = 2^x \cdot 3$ $g(x) = 2^x \cdot 3 - 7$

g(x) =______ Translation Form

g(x) =_____ Translation Form

How does g(x) compare with f(x) when graphed on the same coordinate plane? How does g(x) compare with f(x) when graphed on the same coordinate plane?