$\qquad$ Name $\qquad$ Period $\qquad$ Score $\qquad$

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

2) Using complete sentences, explain why the figure in \#1 is or is not an equilateral triangle.
3) Use a mathematical proof to determine if the figure shown is a rhombus.

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

5) Using complete sentences, explain why the figure in \#5 is or is not a rectangle.
6) Use a mathematical proof to determine if the figure shown is a rhombus.

7) 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. $\begin{aligned} f(x) & =5 x+8 \\ g(x) & =5 x-4\end{aligned}$
$g(x)=$ Translation Form

How does $g(x)$ compare with $f(x)$ when graphed on the same coordinate plane?
10. $f(x)=2^{x} \cdot 3$
$g(x)=2^{x} \cdot 3-7$
$g(x)=$ $\qquad$
Translation Form

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

